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# PSYCHOLOGICAL ABSTRACTS

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# PSYCHOLOGICAL ABSTRACTS

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## GENERAL

1515. Aldrich, V. C. **Discussion. Meaning without mind.** *Phil. Rev.*, 1934, 43, 607-619.—In answer to G. Watts Cunningham's *Contemporary Idealism in America*, Aldrich tries to show that some kinds of meaning may exist without mind. "This spilt milk means the cat" and "the glow in the sky means fair weather" are instances of causal meaning, which the percipient may discover but which would exist whether discovered or not. Representative significance may require a mind to establish the asymmetrical relationship of representation, but this relationship persists long after the mind that established it has passed away. Champollion, when he deciphered the hieroglyphics of the Rosetta stone, did not create their meaning; he discovered it. "We write books . . . to continue meaning what we mean, when we have ceased to mean." Cases of meaning dependent on mind (intentional meaning) the author designates as "projective significance." All cases of causal, representative, and implicational meaning he calls cases of "panoramic significance." The latter depends on mind for its being known, but not necessarily for its being.—*M. F. Martin* (West Springfield, Mass.)

1516. Augier, E. **Mécanismes et conscience.** (Mechanisms and consciousness.) Paris: Alcan, 1934. Pp. 373. 30 fr.—There are four parts to the volume. The first includes a series of determinations and psychological observations on objective observation, observations on sensory and motor facts, and substantive and transitive states and introspection. The second part deals with classification and the organization of the results of observation. The third treats the mechanisms of thought, perception, will, mental investigation, logic, and reasoning. The fourth part is concerned only with facts of consciousness. With the whole studied from the standpoint of philosophical monism, all of the immediate data are of one nature.—*M. H. Piéron* (Sorbonne).

1517. Bergson, H. **La pensée et le mouvant.** (Thought and the moving.) Paris: Alcan, 1934. Pp. 322. 25 fr.—This book contains the articles and lectures of Bergson which have been published in France and abroad between 1900 and 1925, but which are for the most part now inaccessible. The following lectures are included: the possible and the real, philosophical intuition, perception of change, introduction to metaphysics, the philosophy of Claude Bernard, concerning the pragmatism of William James, truth and reality, the life and work of Ravaission. The contents of the first 15 pages are published for the first time. They deal with the following: retrograde movement of the truth, precision in philosophy, why the question of time has been neglected, the status of

knowledge when integrated with duration, the mirage of the present in the past, and the logic of retrospection. The last of these pages deal with duration and intuition, the nature of instinctive knowledge, intelligence, the conditions under which metaphysics and science can help each other, general ideas, theories of knowledge, and finally the philosopher, the scholar, and the intelligent man.—*M. H. Piéron* (Sorbonne).

1518. Boda, I. [Introduction to psychology. Outlines of a psychological system.] Budapest: Francis Joseph University (Szeged), 1934. Pp. 185.—Preface: The goal and its consequences. Psychology and philosophy. Usefulness of theoretical psychology. Psyche and culture. Practical usefulness of a clear theoretical settlement. I. Some fundamental outlines of cognition. The unalterable self-identity of our psychic life. The whole and its appointments. Whole and structure. Appointments of structures. Final elements: subjective-conscious and objective-real structures. Psychic structures. The way of historic evolution. Theoretico-scientific uncertainty of psychology. II. Psychic unity, identity, wholeness, structuralness, 18-29. Chief problems. Consciousness pointing to psychic unity of the self. Conscious organization, its evolution and the law of globality. Unconscious psychic life. Constitution. Personal identity of self. Psychic ideality and reality. Dis-harmony and the idea of life. Synesthesia. Psychic dissolutions. Repression. Psychic traumata. Life as origin of "psychic motion." III. Marks of life; connections of biology and the psychic, 30-39. Central mark of life. Spontaneity of biological motion. Biological and mechanical motion, their causes and aim. Lawfulness, necessity, organization. Physical and biological changes. Sensitiveness and sensibility. Physical and biological "courses." Biologic tendencies. Relation of living to livings. Individuality. Final biological principles. Biological sensitiveness. Other biological marks. The biological impulse. General and special sensitiveness. Instincts. Sensitiveness, disposition, inclination. Tendencies, individual constitution, valuation, self-adjustment. IV. Object of psychology and the beginning of psychic motion, 40-52. Object of psychology is not the conscious, or the event, or the experience, or the behavior. The right psychology starts from inside, out of the subjective intimacy of the living individual. Interpretation of the unconscious. The germ of self. Beginning of psychic life; biological and psychological revolutions. V. Classes of the psychic, 53-88. (a) Factors and conditions of spontaneous and reactive activity. (b) Factors of the organization of psychic unity. (c) Characteristics of psychic motion. (d) Results of psychic actions and reactions. Sorts of thinking. Degrees of clearness of consciousness. Levels of consciousness. Consciousness, self-con-

sciousness, and consciousness of consciousness; personal consciousness, etc. (e) Characteristics of evolution. (f) Standpoints of classification of psychological lawfulness. VI. Psychic lawfulness, 89-123. (a) Demands of interpretation.—P. Ransburg (Budapest).

1519. Bon, F. *Der Gegenstand der Psychologie.* (The subject matter of psychology.) *Erkenntnis*, 1934, 4, 363-376.—States of consciousness exist, but by their nature they cannot be studied scientifically. The subject matter of psychology must be the interactions between the physical objects and the psychological subject. The writer agrees with Carnap that psychology is a branch of physics. He does not agree, however, that every psychological fact may be formulated in the physical language.—J. F. Brown (Kansas).

1520. Brown, C. W., & Ghiselli, E. E. A multiple-unit apparatus for measuring the rat's ability to discriminate visual patterns. *J. comp. Psychol.*, 1934, 18, 451-454.—An apparatus is described in which the rat is required to make a series of successive pattern discriminations. Discrimination is learned as readily as in the apparatuses of Fields and Munn, but this apparatus has an added advantage for comparison of groups in that its reliability (odd versus even trials) is high. The coefficient is .98.—N. L. Munn (Pittsburgh).

1521. Delacroix, H. *Les grandes formes de la vie mentale.* (The chief forms of mental life.) Paris: Alcan, 1934. Pp. 190. 10 fr.—The book contains 17 chapters. The first four discuss consciousness and the unconscious; the following five, instincts and tendencies, pleasure and pain, and habit and memory. Five chapters concern the nature and forms of intelligence; and the last three chapters are devoted to attention, effort, and will.—M. H. Piéron (Sorbonne).

1522. Dodge, H. L. [Ed.] *Abstracts of theses for higher degrees in the Graduate School, 1932.* *Univ. Okla. Bull.*, 1934, N. S. No. 598. Pp. 125. \$1.00.—The following abstracts may be of interest to psychologists: Pearl I. W. Johnson (Ph.D.), The philosophical foundation of the concept of purpose; Louise H. Brown (Ed.M.), A guide to the literature on feelings of inferiority; Bonnie B. Radcliffe (Ed.M.), The after-school adjustment of specifically trained sub-normal children; Cora E. Shoup (Ed.M.), A survey of the literature on the unsocial child; Grace B. Smith (Ed.M.), A personality study of handicapped children; Elizabeth R. Mitchell (M.S.), A comparative study of the mental abilities of physically handicapped and physically normal children; and R. W. Ramey (M.S.), An attempt to condition reactions to a principle rather than a specific stimulus.—M. O. Wilson (Oklahoma).

1523. Dwelshauvers, G. *Traité de psychologie.* (Treatise on psychology.) Paris: Payot, 1934. Pp. 606. 40 fr.—This is a revised edition which takes account of recent work. 63 experiments are described which require neither laboratory nor instruments. The book is divided into six large parts: laws and methods; the chief directions of mental life; elemen-

tary psychic life; sensory syntheses; functional syntheses; and higher structures and faculties of the soul.—M. H. Piéron (Sorbonne).

1524. Eitingon, M. *Abschiedsworte an Sándor Ferenczi.* (Farewell to Sandor Ferenczi.) *Imago*, Lpz., 1933, 19, 289-295.—A general appreciation of the work of Ferenczi (1873-1933), expressed at the memorial meeting for him of the German Psychoanalytical Society in Berlin, June 13, 1933.—H. D. Spoerl (St. Johnsbury, Vt.).

1525. Flayol, M. *Le Dr. O. Decroly, éducateur.* (Dr. O. Decroly, educator.) Paris: Nathan, 1934. Pp. 221.—The author summarizes Decroly's work as a man, a psychologist and an educator, and indicates his place and influence in modern psychology. Two long chapters contain accounts of the applications of Decroly's methods, of his programs, of his views on school organization, and specially of the Hermitage School, whose educational practices were so influential throughout the world. A bibliography of Decroly's works is given.—M. H. Piéron (Sorbonne).

1526. Gemelli, A. *Il punto di vista della neoscolastica di fronte alla moderna psicologia.* (The point of view of neo-scholasticism with reference to modern psychology.) *Riv. Fil. neo-scolast.*, 1934, 26 (Suppl.), 1-25.—Neo-scholastic philosophy early recognized in experimental psychology a movement of ideas which aided in the revival of Aristotelian and scholastic theses of anthropology. This was already the point of view, at the close of the 19th century, which Mercier held in his work on "The origins of contemporary psychology." From the present situation in psychology and philosophy, the author concludes that schools of psychology deal with phenomenological, mechanistic, or materialistic conceptions because they consider only one aspect of mental life, and assume that they can give a general interpretation of psychic life on the basis of partial observations. On the other hand, the tendencies of contemporary philosophy are all monistic, although of different types; and this position does not permit a philosophical elaboration of the facts of scientific psychology. Psychology should be a unit so far as possible. It should be a true anthropology after the conception of Aristotle. It should drop the Cartesian dualism, which brings metaphysics into research, and adopt the Aristotelian view of a unitary life principle, which leads to the observation of man in his totality without fear of materialism. Modern psychological experiments indicate that consciousness and the psychic life do not coincide. Consciousness is aroused by attention. It is the unification of all of the activities of the self in a synthetic unitary activity which is dynamic to the highest degree. This demonstration of the unity and synthetic character of consciousness gives, according to Gemelli, a demonstration of the existential soul. It invalidates the Cartesian position as well as the mechanical and evolutionary theories which consider consciousness an epiphenomenon.—R. Calabresi (Rome).

1527. Geymonat, L. *La nuova filosofia della natura in Germania.* (The new philosophy of nature in Ger-

many.) Turin: Bocca, 1934. Pp. 110. 10 L.—German nature-philosophy follows the positivistic tradition, although influenced by recent scientific discoveries. The author emphasizes the re-evaluation of the concept of quantity, a criticism of conventional epistemology, the new radical empiricism which comes from recent conceptions of geometry and physics, the metaphysical value of scientific realism, and the philosophical significance of the concept of approximate truth.—*R. Calabresi* (Rome).

1528. Geymonat, L. *Note introduttive ad una critica del valore conoscitivo delle scienze.* (Introductory note to a critique of the cognitive value of the sciences.) *Riv. Fil.*, 1932, 24. Pp. 31.—*R. Calabresi* (Rome).

1529. Huston, P. E., & Hayes, J. G. *Apparatus for the study of continuous reaction.* *J. exp. Psychol.*, 1934, 17, 885-891.—Detailed description with schematic diagrams.—*H. W. Karn* (Clark).

1530. Kao, K. F. *Neo-behaviorism.* *Educ. Rev.* (Chinese), 1934, 24, No. 1, 107-111.—According to the author, Coghill's researches on the embryonic development of *Ambystoma*, Kuo's studies of the embryonic behavior of chicks, and Lashley's experiments on the cerebral functions of learning, in spite of much conflicting opinion among themselves, have all demonstrated that behavior in the early embryonic stage is not of a specific-reflex nature, and have all in a negative way pointed out that neither the concept of reflex arc nor the assumption of complex behavior as a combination of simple reflexes is wholly satisfactory. Thus the "old behaviorism" has to give way to a "new behaviorism."—*C.-F. Wu* (Nat. Res. Inst. Psychol., Shanghai).

1531. Kornilov, K. N. *Psichologia.* Moscow: GIZ, 1934. Pp. 160.—A textbook of psychology for teachers' colleges. It is divided into three parts: basic principles of psychology, general problems of human personality, and special problems of mental behavior. The first part is divided into: historical development of psychology, subject matter of psychology, psychological methods, and applications of psychology. The second part is divided into: social factors in human personality, biological factors in human personality, and psychological factors in human personality. The third part is presented in the following chapters: perception and sensation, attention, memory, imagination, speech and thought, feelings and emotions, instincts or urges, will. Behaviorism is declared to be mechanistic and introspective psychology idealistic, while Gestalt psychology is also veiled idealism, deriving as it does its philosophical premises from Ernst Mach. Dialectical psychology considers mind a function of highly organized matter, consciousness the reflection of the external world in the human organism that has arisen in the processes of human labor and is therefore social in content. It further recognizes the unity but not the identity of the mental and the physical and stresses the qualitative distinctions of special mental functions.—*G. H. S. Razran* (Columbia).

1532. Léenhardt, H. *Nature de la connaissance et l'erreur initiale des théories.* (The nature of knowledge and the initial error of theories.) Paris: Alcan, 1934. Pp. 350. 35 fr.—This work is divided into three major parts. The first, entitled "organic knowledge" contains 5 chapters: (1) the problem of knowledge; (2) animal knowledge, including rudimentary knowledge, the child and the animal mind, and the genesis of consciousness; (3) and (4) sensation; (5) consciousness. The second part of the book considers intellectual knowledge under the headings of the function of concepts and rational knowledge. The third part is devoted to scientific knowledge. Here are discussed the possibility of science, the elaboration of science, and the implications of scientific knowledge.—*M. H. Piéron* (Sorbonne).

1533. Loucks, R. B. *A technique for faradic stimulation of tissues beneath the integument in the absence of conductors penetrating the skin.* *J. comp. Psychol.*, 1934, 18, 305-313.—"A technique is presented for the faradic stimulation of tissues beneath the integument without bringing wires through the skin." A collodion-coated coil is embedded beneath the skin with insulated wires leading to the point to be stimulated. This coil, although sealed off from the outside world, will absorb energy from an activated primary 'field' coil outside the experimental animal, and the current thus induced will cause a shock at the tips of the electrodes. An inexpensive but usually stable thyratron generator, run from commercial power lines, is used to provide the current for the energizing electromagnetic field." There are diagrams showing the coil, the circuit for the generator, the oscillogram of the stimulating current, and the arrangement of the apparatus and animal in experimenting with dogs.—*N. L. Munn* (Pittsburgh).

1534. Marczell, M. *A bontakozó élet.* (Life in evolution. Vol. V. Outlines of the psychic life of adults.) Budapest: 1934.—Preface, 5-8. Introduction, 9-20. I. On the plan of active life, 21-78. A. Trials. 1. Struggle for life. 2. The securing of mastery. 3. Preparation of mind and soul. B. The stratification of life. 1. The "upper ten thousands." 2. Middle class. 3. The peasant and the farmer. 4. The laborer: (a) industrial workmen, (b) farm workmen, (c) servants. II. The evaluation of the values of life, 79-202. A. Multiplication of the individuum. (a) Within matrimonial life. 1. Preparations for matrimony. 2. Contents of matrimony. 3. Difficulties of matrimony. 5. Tragedies and vicissitudes of matrimony. (b) Unmarried life. 1. Psychical contents of unmarried life. 2. Celibacy (clergy). 3. Nuns. 4. Bachelors and spinsters. B. Irradiations of personality. 1. Essence and limits of irradiation of energy. 2. Service of civilization. 3. Lifting up of culture. 4. Psychical affects of beauty. 5. Lifting up of moral level. 6. Regulation of social life. 6. Fructification of psychic life. III. Dissipation and repossession of the values of life, 203-274. A. On the battlefield of life. 1. Breakdown of the view of life. 2. Moral breakdowns. 3. Moral depths. 4. Somatic breakdown. 5. The prodigal son. B. On the entrance of

eternal life. 1. The great losses. 2. Internal life of old people. 3. Psychic burdens. 4. Psychic tendencies of old people. Epilogue, 275-278. Index, 279-294.—*P. Ranschburg* (Budapest).

1535. Mead, G. H. *Mind, self and society: from the standpoint of a social behaviorist.* (Ed. with introduction by C. W. Morris.) Chicago: Univ. Chicago Press, 1934. Pp. 401. \$5.00.—The volume contains previously unpublished material derived from stenographic and student notes on lectures delivered by Mead on social psychology. Morris has the following to say about Mead's behaviorism: "Not merely was it to include the neglected social aspects of the act, but also the internal aspects of the fact open mainly, but not exclusively, to the observation of the acting individual himself. . . . Behaviorism . . . [is] the approach to all experience in terms of conduct." The volume is divided into four parts: the point of view of social behaviorism; mind; the self; and society. Four supplementary essays treat the function of imagery in conduct, the biologic individual, the self and the process of reflection, and fragments on ethics. It is under the topic of mind that Mead's views on language (gesture, imitation, meaning, and the symbol) are developed.—*W. S. Hunter* (Clark).

1536. Peirce, C. S. *Collected papers. Volume V. Pragmatism and pragmaticism.* (Ed. by C. Hartshorne and P. Weiss.) Cambridge: Harvard Univ. Press, 1934. Pp. 455. \$5.00.—The present volume, according to the editors, contains practically everything of importance which Peirce is known to have written concerning his famous theory of "how to make ideas clear." Half of the present volume consists of previously unpublished papers, the significance of which lies in the light they throw upon certain obscure aspects of pragmatism. Book I contains the pragmatism lectures of 1903, which deal primarily with questions of phenomenology, epistemology, and value. The second book contains previously published papers. The first three papers show the tendency towards pragmatism of Peirce's thought in 1868. Papers IV to VII contain the published accounts of pragmatism on the basis of which his theory has hitherto been judged. The remaining selections in the second book, and all of the unpublished papers which compose the third book, were written in Peirce's later years and give a detailed account of his views heretofore inaccessible. In a note at the beginning of the volume the editors attempt to give a summary of Peirce's pragmatic point of view. "Pragmatism" is the term Peirce uses to indicate his divergences from other pragmatists.—*C. B. Shaw* (Boston University).

1537. Rey, A., Piéron, H., Gonseth, F., Wallon, H., Mineur, H., Halbwachs, M., Berthoud, A., Simiand, F., Cuénod, L., Chapot, V., & Febvre, L. *Science et loi.* (Science and law.) Paris: Alcan, 1934. Pp. 227. 20 fr.—The volume contains 9 discussions. Rey presents the history of the notion of law. After this the following topics are presented: law in the mathematical sciences, Gonseth; law in mechanics and astronomy, Mineur; law in psycho-chemistry, Ber-

thoud; law in biology, Cuénod; law in psychology, Piéron and Wallon; law in sociology, Halbwachs; and chance in history, Chapot.—*M. H. Piéron* (Sorbonne).

1538. Schechtman, D. *The conception of law in statistics and mechanics.* *Phil. Rev.*, 1934, 43, 565-576.—The author seeks to show the fallacy of H. B. Smith's contention that statistical laws can be converted into mechanical laws by merely adding a coordinate. He characterizes it as most amazing doctrine that by the mere process of a "methodological shift . . . we can transform our probabilities into certainties."—*M. F. Martin* (West Springfield, Mass.)

1539. Schiller, P. *Pszichológia és emberismeret.* (Psychology and the knowledge of man.) Budapest: Pantheon, 1934. Pp. 146.—A textbook, dealing in the first part with modern psychology and in the second with its application to personnel research. Psychology is defined as the science of behavior and experience in man. Four principal problems are: perception, intellect, action, estimation. These are investigated from the standpoint of evolution. Perception is shown in its evolution from cenesthetic sensations to perception of the constancy type. Intellect is shown in its different stages from interest to critical thinking. Action is shown in its development from spontaneous action to work. By estimation the author understands emotion and will, the source of dynamism in psychology. In the second part the methods are reported which approach a knowledge of man. They are of two different types, the testing of accomplishments and the investigation of personality. The latter cannot be carried out by tests, but only by observing men in situations which demand complicated behavior. This sort of observation is used for selecting army officers. Whereas the tests can ascertain perception, intellect and action, behavior research demonstrates the traits of character, i.e., emotion and will.—*P. Ranschburg* (Budapest).

1540. Schiller, P. *A pszichológia új utjai.* (The new orientation in psychology.) *Protestáns Szemle*, 1934, 43.—The new problems, methods and thoughts of psychology are dealt with on a historical basis. Behaviorism brought new methods, psychoanalysis new problems, and Gestalt theory a new manner of thinking.—*P. Ranschburg* (Budapest).

1541. Shemiakin, F., & Gershonovich, L. *Kak Trotsky i Kautsky revizuyut marksizm v voprosakh psichologii.* (How Trotsky and Kautsky revise Marxism in problems of psychology.) *Psichologija*, 1932, 1-2, 3-62.—Trotsky is a crude mechanical materialist and an adherent of Freud, whom he tries to interpret mechanistically. Scientific, or materialistic, psychology, he says, does not need any "soul" to account for its phenomena, but reduces them to physiology. The so-called "soul" is nothing more than a complex system of conditioned reflexes, based upon primary physiological reflexes, which in turn send their roots down, through the mighty layer of chemistry, to the substrata of physics and mechanics. Idealism teaches that the "soul" is a well

without a bottom. Pavlov and Freud hold physiology to be the bottom of the well. But, while Pavlov dives to the ground and painstakingly studies the well from below up, Freud stands above the well and attempts to sound and chart the bottom by piercing through the thick ever-flowing turbid waters from above. Sublimations are no more than conditioned reflexes of higher orders. Kautsky is anthropomorphic, with veiled idealistic tendencies. He says: Animals already need a certain degree of foresight. Animal reactions are impossible not only without a certain knowledge of causal relationships but also without some foresight of the future. From the knowledge of these causal relationships in carp that can be taught to consider the noise of approaching steps as the cause of their feeding to the various all-embracing types of contemporary science is a long distance, but the functions of knowledge are in all cases essentially the same. Both Trotsky and Kautsky over-emphasize the biological determinants of human nature, do not realize the particularity of the emergence of man—all of which is in line with their political menshevik social-democratic tendencies. True Marxism-Leninism teaches that human personality is a product of social relationships; that man differs and evolved from animals only when man began to labor, to produce the necessary means for his livelihood; that evolution is brought about by emergences and mutations, by breaks in gradual processes, by conversion into opposites, by building the new upon the ruins of the old.—G. H. S. Razran (Columbia).

1542. Simmel, E. *Gedenkrede für Sándor Ferenczi*. (Memorial address for Sándor Ferenczi.) *Imago*, Lpz., 1933, 19, 296-311.—Starting as a neurologist, Ferenczi at first paid no attention to Freud. In 1908 he went over to the psychoanalytical movement and later brought about its organization. His contributions were numerous and varied. Among his most important work were his studies of sex and his systematic development of psychoanalysis as a scientific theory.—H. D. Spoerl (St. Johnsbury, Vt.)

1543. Spirito, U. *Scienza e filosofia*. (Science and philosophy.) Florence: Sausoni, 1933. Pp. 154. 12 L.—This is a collection of essays relative to the connection between current philosophy and science. According to the author the present day shows a self-conscious science.—R. Calabresi (Rome).

1544. Talankin, A. *Protiv menshevistvuyushchevo idealizma v psichologii*. (Against menshevistic idealism in psychology.) *Psichologia*, 1932, 1-2, 38-62.—A number of Soviet philosophers and psychologists are again embracing menshevistic theoretical views, introducing mechanism (which leads to idealism) and thus deviating from the true dialectical Marxism-Leninism. Deboring and his group divorce theory from practice, distort the basic Marxian principles of mind, and encourage Gestalt psychology and Kornilov reactology. They embark upon a road of eclecticism, attempt to reconcile objectivism and subjectivism in bourgeois psychology instead of proclaiming the dialectical principles of psychology as given by Marx, Engels, and Lenin. Similarly, Korni-

lov, Frankfurt, Kurazov, Zalkind, and others are under the influence of Pavlov's physiologism, Watson's and Weiss' behaviorism, Darwin's biologism, Bekhterev's reflexologism, and Plekhanov's methodology. The biologism is considered particularly obnoxious, as according to Marxism the essence of man is not some abstraction peculiar to some individual but the sum-total of social relations, and the genetico-biological is insignificant in contemporary man, who is a product of a definite class.—G. H. S. Razran (Columbia).

1545. Tolman, E. C., & Brunswik, E. *The organism and the causal texture of the environment*. *Psychol. Rev.*, 1935, 42, 43-77.—The environment of an organism has the character of a complex causal texture in which certain objects may function as the local representatives of others, either by providing means-objects to the others, or by serving as cues for the others (since they are causally related to them). The simplest paradigm involving such local representation is one in which an organism is presented with a single behavior-object lying between the organism's need-goal side and its reception-reaction side, which functions either as means-object for reaching the goal or as a source of cues. Often more than one means-object is involved from several aspects (i.e. discriminanda, manipulanda, or utilitanda). And, with primitive organisms, there are often no distinctive intervening means-objects. Moreover, the causal couplings between goal and means, or between means and cue, are usually equivocal, so that the organism is forced to form hypotheses as to what goal the given means-object will most probably lead to, etc. This leads to a classification of means-objects into four types: good, ambivalent, indifferent, bad; and a classification of cues into reliable, ambiguous, non-significant, and misleading. Therefore the organism must develop cue systems which are both inclusive and finely discriminated. Such a process involves all phases of psychology.—A. G. Bills (Chicago).

[See also abstracts 1552, 1599, 1618, 1702, 1887.]

#### SENSATION AND PERCEPTION

1546. Abbott, E. J. *Scales for sound measurement used in machinery noise reduction*. *J. acoust. Soc. Amer.*, 1935, 6, 137-150.—The various scales, physical and psychological, used in sound measurement are discussed and criticized. One psychological and two physical scales are recommended as preferable for expressing sound measurements.—S. S. Stevens (Harvard).

1547. Alajouanine, T., Thurel, R., & Brunelli, —. *Syndrome sensitif cortical avec troubles de la sensibilité profonde à topographie pseudo-radiculaire. Instabilité et astéreognosie limitée aux trois derniers doigts*. (Cortical sensory syndrome with disorders of deep sensibility in the pseudo-radicular area. Instability and astereognosia limited to the last three fingers.) *Rev. neurol.*, 1934, 41, 560-564.—A presentation of two cases in which the cortical sensory syndrome is dissociated, showing a segmental and

pseudo-radicular topography of deep sensibility. The author emphasizes a sign, which appears from the onset, of the loss of a sense of position, viz., the instability of the fingers in the attitude of taking an oath, eyes closed. In the disorder of the concept of position one obtains progressively and gradually a flexion and spreading of the fingers. This movement brings about a relaxation of the fingers which is unconscious and so cannot be modified by the patient.—*M. H. Piéron* (Sorbonne).

1548. Andreev, A. M., Volokhov, A. A., & Gershuni, G. V. [The excitability of the aural organ.] *Fiziol. J. USSR*, 1934, 17, 546-560.—The discharges of a condenser included in a circuit with the hearing apparatus have evoked in subjects aural sensations which are like knocking or a musical ringing. The chronaxy of aural sensations varies from 0.1 sigma (in normal subjects) to 1.5 sigma (subject with aural disorders). The occurring of aural sensations depends upon the electrical irritation of the nervous elements of the aural apparatus. The strength-duration curve of chronaxy shows the difference between the sensations of knocking and ringing, which shows the presence of elements with different excitability.—*A. Yarmolenko* (Leningrad).

1549. Becker, J. Über taktilmotorische Figurwahrnehmung. Versuche mit 9 bis 11 jährigen Schulkindern. (On the tactual-motor perception of figures. Experiments with 9-11-year-old school children.) *Psychol. Forsch.*, 1934, 20, 102-157.—School children were tested in their ability to recognize figures through touch and movement, and such perception was compared with visual perception of figures. It was found that: (1) In tactual-motor perception striking differences are present from the real form of the object as perceived visually. (2) These deviations are to be referred to definite figural factors. (3) These factors are similar to certain factors in optical perception. (4) The blinded and congenitally blind have the same type of tactual-motor perception as the seeing. (5) The tactual-motor perception is a Gestalt process.—*J. F. Brown* (Kansas).

1550. Benedict, A. A., Gorham, J. E., Higgins, G. C., & Lauer, A. R. The differential limen for matching spectral colors by subjects with normal color vision. *J. comp. Psychol.*, 1934, 18, 437-449.—The amount of error made by 21 subjects with normal vision in matching a color band of given intensity was determined for different points on the spectrum. The subject looked into a spectrophotometer and matched the color seen there with a color (determined by his adjustment) seen in a spectrometer. The error was determined in terms of the deviation of Ångström units between the standard and the produced color. "A marked tendency to under-estimate green was noted at lowered intensities. In the longer wave lengths the reverse holds true. These curves cross at about 5600 Å, which is near the theoretical point of maximum effect on the human eye . . . the curves tend toward parallelism between this point and 5879 Å in the spectral range." Detailed data on the tendency toward over-estimation or under-estimation

for various colors and for different intensities are reported.—*N. L. Munn* (Pittsburgh).

1551. Blyth, J. W. A discussion of Mr. Price's "Perception." *Mind*, 1935, 44, 58-67.—Philosophical objections to a philosophical theory of perception.—*H. Helson* (Bryn Mawr).

1552. Bonnardel, R. Appareil pour l'étude de l'éblouissement et de l'adaptation aux faibles éclairages. (Apparatus for the study of glare and adaptation to faint illumination.) *C. R. Soc. Biol., Paris*, 1934, 117, 106-107.—The diagnosis of the anomalies of twilight vision and of the rapidity of the recovery of this vision after glare is important in establishing a vocational selection and guidance. The author has constructed an apparatus for the study of this problem.—*M. H. Piéron* (Sorbonne).

1553. Bujas, Z. Quelques remarques sur le contraste et l'inhibition à la suite d'excitations gustatives simultanées. (Some remarks on contrast and inhibition following simultaneous gustatory excitation.) *C. R. Soc. Biol., Paris*, 1934, 117, 1304-1306.—The sensitivity for certain stimuli is not independent of other simultaneous excitations. This dependence may manifest itself in two ways: as an increase (contrast) or as a decrease (inhibition) of the corresponding sensibility. Using a precise technique, the author studied the relations between such contrasts and inhibitions. The results indicate that the inhibition does not seem to increase linearly, as required by the law of Heymans, but to increase logarithmically. Contrast also does not agree with the law of Heymans. The verified fact that it is possible to produce both inhibition and contrast by stimulating separate regions of the tongue suggests that both phenomena are essentially central in character.—*M. H. Piéron* (Sorbonne).

1554. Bujas, Z. Le temps d'action des stimuli de la sensibilité gustative. (The action time of stimuli for gustation.) *C. R. Soc. Biol., Paris*, 1934, 117, 1307-1309.—The problem was to determine the variations of liminal gustatory stimulation as a function of the action time. If one represents duration of action on the abscissa and liminal intensity on the ordinate, the resulting curve is more or less equilaterally hyperbolic, with one part asymptotic to the ordinate and the other part parallel to the abscissa. The relation of the liminal values to action time is essentially linear, in accord with the law of Horweg-Weiss, which applies to the electrical stimulation of nerve.—*M. H. Piéron* (Sorbonne).

1555. Canac, F. Mesure des intensités sonores par le méthode des scintillations. (Measurement of sound intensities by the scintillation method.) *J. Phys. Radium*, 1931, 2, 42-64.—(*Biol. Abstr.* VIII: 19996).

1556. Clark, B. Heterophoria in college students. *Amer. J. Optom.*, 1935, 12, 9-10.—The author draws the following conclusions after measuring the near-point phorias of 191 unselected college freshmen: either (1) approximately 90% of the young men and women in college have improper binocular balance,

or (2) new norms or standards should be considered for this age level. The latter appears to be by far the more probable.—R. J. Beitel (Clark).

1557. Dionessov, S. M., Zagorulko, S. T., & Lebedinsky, A. V. [The interrelations between central and peripheral vision.] *Fiziol. J. USSR*, 1934, 17, 560-579.—The level of the sensitivity of the receptor system at each moment is determined not only by the value of the stimulus, and not only by the adaptive changes of the receptor or the elements of the nervous system, but also by the functional state of the connected afferent system and other afferent systems of the organism.—A. Yarmolenko (Leningrad).

1558. Du Plessis, G. L. Astigmatism-torsions and their effect on each other. *Amer. J. Optom.*, 1935, 12, 11-28.—"Defects of the oblique muscles have been entirely neglected in the etiology of squints, phorias and ocular complaints. Oblique astigmatism is generally the cause of malfunctioning of the obliques, and a correct understanding of the relation of one to the other is necessary for the proper handling of that type of case."—R. J. Beitel (Clark).

1559. Felden, F. Ein Beitrag zur Frage des Tiefendrucksinnes, dargestellt durch Untersuchungen über Auslösung des Schluckreflexes beim Menschen durch mechanische Reizung. (A contribution to the question of the deep pressure sense, presented through investigations on the elicitation of the swallowing reflex in man by mechanical stimulation.) Leipzig: Gerhardt, 1933. Pp. 19.—(Not seen).

1560. Fry, G. A. New observations related to the problem of color contrast. *J. exp. Psychol.*, 1934, 17, 798-804.—When a given retinal area is steadily stimulated with white light, a yellow contrast color may be induced upon it by stimulating the surrounding area intermittently with white light, just as if the surrounding area were steadily stimulated with blue light. The author proposes a color theory which can account for these facts and which is in harmony with Troland's suggestion that the transmission of color impressions from the retina to the cortex depends upon the modulation of the optic nerve current. It is shown that under certain conditions the border between the exciting and responding fields may be blurred, but yet phenomenally a sharp border is obtained. The physiological processes involved in the formation of this phenomenal border are not clearly understood.—H. W. Karn (Clark).

1561. Gassovsky, S. N., & Samsonova, V. G. [The eye and the means of increasing its work ability.] Leningrad: Voomp, 1934. Pp. 124.—This collected volume contains 7 articles on the problem of increasing the efficiency of the optic organ. The problem of optic fatigue is analyzed in the first two articles: "The influence of optic tension on the fundamental values of the optic apparatus" and "Optic fatigue in work on the stereodialnomer." The phenomenon of pulse fluctuation in the state of accommodative tension of the eye was investigated also. The last four articles consider the methods of optical investigation

and the new devices for it.—A. Yarmolenko (Leningrad).

1562. Gibson, J. J. Vertical and horizontal orientation in visual perception. *Psychol. Bull.*, 1934, 31, 739-740.—Abstract.—J. F. Dashiell (North Carolina).

1563. Giotti, G. Sulle localizzazioni delle sorgenti sonore. (On localization of sources of sound.) *Ric. sci.*, 5th year, 1, No. 8.—The position of a source of sound in relation to an observer seated in the plane of reflection is determined geometrically when the difference is known between the time of arrival at the auditory organs of the wave reflected by the plane and the time of arrival of the direct wave.—R. Calabresi (Rome).

1564. Girden, E. Function of the round window in hearing. *Psychol. Bull.*, 1934, 31, 752-753.—Abstract.—J. F. Dashiell (North Carolina).

1565. Hallpike, C. S., & Rawdon-Smith, A. F. The origin of the Wever and Bray phenomenon. *J. Physiol.*, 1934, 83, 243-255.—On histological examination of changes in the internal ear resulting from intracranial section of the eighth nerve in the cat, it was found that there was a complete disappearance of all neural elements of the cochlea with preservation of the vascular supply. The electrical responses of the cochlea and auditory tracts were found to be absent six months after section of the eighth nerve. This morphological evidence, the author suggests, is in support of the neural view of the origin of the Wever and Bray phenomenon. The author finds arguments against this view inconclusive.—M. A. Rubin (Clark).

1566. Hartmann, G. W. The facilitating effect of strong general illumination upon the discrimination of pitch and intensity differences. *J. exp. Psychol.*, 1934, 17, 813-822.—Experiments are described the results of which lead the author to conclude that most adult subjects are capable of somewhat finer tonal discrimination under bright illumination than under dim or dark conditions. There is also some indication that persons whose normal performance is relatively poor are the ones in whom visual facilitation is most marked. With a few subjects the light produced a zero or even inhibiting result upon the auditory discrimination. These exceptional subjects were studied further in the hope that some constitutional factor might be found to explain their behavior, but none was detected.—H. W. Karn (Clark).

1567. Henneman, R. H. A photometric study of the perception of object color. *Psychol. Bull.*, 1934, 31, 738-739.—Abstract.—J. F. Dashiell (North Carolina).

1568. Kravkov, S. V. Changes of visual acuity in one eye under the influence of the illumination of the other or of acoustic stimuli. *J. exp. Psychol.*, 1934, 17, 805-812.—New and recently published experimental evidence and theoretical considerations are presented which, the author contends, fully establish the fact of an opposite action of indirect stimulation in the case of black objects on a white ground and in

the case of white objects on a black ground. Particular reference is made to the experiments of G. W. Hartmann which tended to disprove the author's earlier findings. It is shown that a difference in methods accounts for the difference of results.—*H. W. Karn* (Clark).

1569. *Krolik, W. Über Erfahrungswirkungen beim Bewegungssehen.* (On the effect of experience on visual movement.) *Psychol. Forsch.*, 1934, 20, 47-101.—Duncker's technique (*Psychol. Forsch.*, 1929, 12) for studying induced movement was used to study such movement where the figures used were pictures of actual objects which the subjects had previously experienced as moving or being at rest. The chief finding was that the induced movement is almost always that which would be expected from experience. Besides the factors already reported by Duncker and Oppenheimer (see IX: 1575) as influencing induced movement the following were uncovered: (1) a tendency to unity of the system of reference, (2) a tendency to centralization of the system of reference, (3) a tendency to conservation of the reference relationships. The effect of experience is not to be deduced from fixation and eye movement, but is rather to be deduced from Duncker's "law of movement distribution."—*J. F. Brown* (Kansas).

1570. *Lanchester, F. W. Discontinuities in the normal field of vision.* *J. Anat., Lond.*, 1934, 68, 224-238.—(*Biol. Abstr.* VIII: 20007).

1571. *Luedde, W. H. The mechanism of accommodation. Facts and fancies.* *Arch. Ophthal., Chicago*, 1932, 7, 40-70.—(*Biol. Abstr.* VIII: 20009).

1572. *Mayou, S. The result of orthoptic treatment in divergent strabismus.* *Brit. J. Ophthal.*, 1935, 19, 37-46.—Cases of divergent strabismus benefit from orthoptic treatment whether they can be cured by treatment alone or need an operation. The majority of cases seen are cured by orthoptic treatment without operation. The percentage of emmetropic cases is very high and the majority of them come under the heading of periodic or occasional divergent strabismus. There are very few divergent squints associated with amblyopia.—*R. J. Beitel* (Clark).

1573. *Metzger, W. Tiefenerscheinungen in optischen Bewegungsfeldern.* (Depth phenomena in optical movement fields.) *Psychol. Forsch.*, 1934, 20, 193-260.—The general technique used by Metzger (see VIII: 5381) in investigating phenomenal identity is used to investigate the appearance of depth in movement constellations. Optical movement constellations in which the stimulus distribution continually changes produce under certain conditions depth phenomena. These are not explainable on the basis of knowledge, expectation, set, or physiological factors. The conditions are investigated in detail. The theoretical possibilities for the explanation of these phenomena are worked over, and it is concluded that the tendencies to unity, simplicity, symmetry, and continuity in the movement processes are original and natural tendencies toward order in the spatial-temporal perception Gestalts. They are not to be

"explained" by reduction to other psychological or physiological factors.—*J. F. Brown* (Kansas).

1574. *Mussio-Fournier, J. C., & Helquera, R. A. L. Optic nerve and myxedema.* *Endocrinology*, 1934, 18, 527-531.—A woman of 24 developed a thyroid deficiency accompanied by a marked reduction of visual acuity. Vision was markedly improved by thyroid medication.—*D. J. Ingle* (Mayo Foundation).

1575. *Oppenheimer, E. Optische Versuche über Ruhe und Bewegung.* (Optical experiments on rest and movement.) *Psychol. Forsch.*, 1934, 20, 1-46.—The work of Duncker (*Psychol. Forsch.*, 1929, 12) on induced movement is carried further in these experiments, using the same general technique. The experiments confirm the essentials of Duncker's findings and uncover other conditioning factors: (1) Movement is induced in the object which undergoes change. (2) Movement is induced in the less intense object. (3) Movement is induced in the smaller of two objects. (4) Movement is induced in the horizontal rather than the vertical of two lines. The relative influence of the different conditioning factors was measured.—*J. F. Brown* (Kansas).

1576. *Plassmann, J. Ueber einen Fehler beim Schätzen von Abständen.* (An error in the judgment of distances.) *Z. angew. Psychol.*, 1934, 47, 387-390.—Certain stars appear nearer to us than others on account of their differences in brightness and their relative position in the sky.—*K. F. Muenzinger* (Colorado).

1577. *Posthumus Meyjes, F. E. Recherches expérimentales sur l'anatomie du système acoustique central.* (Experimental researches on the anatomy of the central acoustic system.) *Encéphale*, 1934, 29, 433-465.—The auditory cortical representations are always much disputed. The author is principally concerned with the higher level of auditory conduction, the connections between the internal geniculate body and the cortex. Is there any localization in the connections from the internal geniculate body to the cortex, and are there any descending paths from the temporal lobe to the internal geniculate body or to the inferior colliculi? If so, is there any localization? Rabbits were used. In 18 experiments where various areas and extents of the temporal cortex are destroyed with a scalpel, there was a simple atrophy of the homolateral internal geniculate body; but no change was noted in the heterolateral ganglion. The atrophy did not reach all parts of the marginal nucleus; only the deep parts were affected. The author established that there is no constant relation between the topography of the temporal cortical lesion and the extent of the atrophy in the internal geniculate body. The inferior colliculus is never changed. Furthermore, there is an important descending tract from the whole of the temporal area toward the homolateral geniculate body, especially to the deep nucleus. The author believes that this descending tract may have a significance in auditory attention which is biologically primitive and vague.—*M. H. Piéron* (Sorbonne).

1578. *Pradines, M. Philosophie de la sensation. Tome 2. La sensibilité élémentaire (les sens pri-*

maires), le sens de la défense. (Philosophy of sensation. Vol. 2. Elementary sensibility (the primary senses), the sense of defense.) Paris: Les Belles Lettres, 1934. Pp. 378. 50 fr.—The following 6 chapters compose the volume: the biological function of touch, tactile activity; different theories of touch and pain (Von Frey, Goldscheider, Head); tactile perceptions of space, the sense of position and extension; the sense of force, weight, and movement; the fundamental tactal qualities, hardness, surface, resistance, and roughness; and the temperature sense. According to the author, touch is an incomplete, not an inferior sense. The superior senses can complete touch only by including it.—*M. H. Piéron* (Sorbonne).

1579. Ranjard, R. Contributions à la physiologie du développement de l'audition par les sons fondamentaux des voyelles. (Contributions to the physiology of the development of audition by the fundamental sounds of the vowels.) *C. R. Acad. Sci., Paris*, 1934, 199, 492-494.—One may consider that in all cases of deafness due to an organic lesion there are two essential pathological elements, one the limitation of normal functioning by the lesion and the other a weakening by inactivity of a function already deficient. The development of audition by means of the sirens of Marage occurs by an effect upon the above two factors.—*M. H. Piéron* (Sorbonne).

1580. Rischard, M. Physiologie des réflexes lumineux et accommodateurs, signe d'Argyll-Robertson. (Physiology of the light and accommodatory reflexes, Argyll-Robertson sign.) *Ann. Oculist., Paris*, 1934, 171, 755-765.—The different effects of tabes on these two reflexes indicate the marked difference between them. The accommodation reflex is a voluntary motor act, while the light reflex is a true sensory reflex.—*M. H. Piéron* (Sorbonne).

1581. Rochon-Duvigneaud, A. La fovea et ses fonctions dans la série des vertébrés. (The fovea and its functions in the vertebrate series.) Paris: 1934. Pp. 16.—The following topics are presented: the retina in the animal series; binocular interfoveal relations; the zoological point of view; and the biological viewpoint, visual behavior according to diverse modes of association of the fovea.—*M. H. Piéron* (Sorbonne).

1582. Ronchi, V. Di un effetto strano nella localizzazione delle immagini sonore. (Concerning a strange phenomenon in the localization of sound images.) *Ric. sci.*, 4th year, 2, No. 7-8.—The author notes that when a sound is heard which is reflected by a plane surface the sound image is located on the surface itself rather than in the symmetrical region with reference to the plane of reflection. This conclusion is supported by some 100 observations.—*R. Calabresi* (Rome).

1583. Ronchi, V. Sul funzionamento del senso dell'udito. (Concerning the mode of functioning of the auditory sense.) *Ric. sci.*, 1934, 5th year, 1, No. 6.—After a comparative discussion of the functions of the eye and the ear as receptors for vibrations, the author deduces that the strange phenomenon of sound reflection which he had discussed earlier is to

be considered a normal occurrence.—*R. Calabresi* (Rome).

1584. Schiller, J. Az érzéki eszrevévelés elmélete. (The theory of perception.) *Athenaeum*, 1934, 21.—The connection of sensation and perception is due to quantitative differences in sensitivity to configurational stimuli.—*P. Ranschburg* (Budapest).

1585. Schriever, —, & Hegemann, F. La sommation dans les excitations sensorielles. (Summation in sensory excitations.) *C. R. Soc. Biol., Paris*, 1933, 113, 720-722.—The authors have obtained laws of summation identical with those of Lapicque for the cutaneous sensation of cold, pricking pain, taste, and vertigo. They were unable to obtain cutaneous warmth, and the sensation of mere luminosity does not involve a real summation.—*M. H. Piéron* (Sorbonne).

1586. Sexe, J. Etude sur les écoles d'amblyopes. (A study of the schools for amblyopes.) Paris: Marcel Vigne, 1933. Pp. 245.—The amblyopes, the weak-sighted, whose visual acuity is only 0.1-0.3, constitute about 1 per 1000 of the population. They must have special classes in order to profit by instruction. The author discusses their vocational guidance and suggests certain trades. Extensive bibliography.—*M. H. Piéron* (Sorbonne).

1587. Sharp, W. L. An experimental study concerning visual localization in the horizontal plane. *J. exp. Psychol.*, 1934, 17, 787-797.—This paper reports investigations in which answers to three questions were sought: (1) With what accuracy do individuals localize visual objects as in the plane horizontal with the eyes, when the usual external cues are excluded? (2) Does practice in this particular function, without knowledge of results, bring improvement in the function? (3) Does the tilt at which the head is held materially alter the accuracy of the localization? The chief experimental findings are summarized as follows: (a) Individual differences with respect to the accuracy of localization are great. The average perceived level ranges from 3.73 degrees above the true level to 17.42 degrees below. (b) The amount of error seems to be a function of the direction of movement of the visual object. (c) Subjects tend to drop the average perceived level progressively lower as they are removed in time from a view of the room surroundings. (d) Practice, continuing at least six hours, does not result in improvement. (e) Accuracy in localization is not altered by changing the tilt of the head as much as five degrees above or below the normal posture.—*H. W. Karn* (Clark).

1588. Steeg, E. Beiträge zum Problem: Sehgrösse und Gesichtsfeld. (Contribution to the problem of visual size and field.) Gelnhausen: Kalbfleisch, 1932. Pp. 52.—(Not seen).

1589. Stevens, S. S. The relation of pitch to intensity. *J. acoust. Soc. Amer.*, 1935, 6, 150-154.—"Measurements were made of the amount by which the pitch of tones ranging from 150 to 12,000 cycles is changed by an increase in intensity. Observers were presented alternately with two tones of different

frequency and required to make them sound equal in pitch by varying the intensity of one of the tones. The results, when plotted as equal pitch contours, show (1) the pitch of high tones increases with intensity, (2) the pitch of low tones decreases with intensity, (3) the point at which the effect reverses varies with intensity level. The fact that the points of reversal correspond quite closely with the points of greatest sensitivity of the ear, as shown by contours of equal loudness, suggests that the change in pitch due to changes in intensity is due to the resonant characteristics of the ear."—S. S. Stevens (Harvard).

1590. Travis, L. E., & Martin, R. A study of retinal summation. *J. exp. Psychol.*, 1934, 17, 773-786.—The purpose of this study was to see whether the visual acuity of two separate and distinct retinal areas, one in the temporal and the other in the nasal half of the same eye, stimulated simultaneously, was greater than the visual acuity of either one of these areas stimulated separately. 50 normal adults served as subjects. The sexes were equally represented. Analysis of the findings reveals that the two halves of the retina stimulated simultaneously were distinctly superior to either half stimulated separately. There is some evidence that the temporal half of the retina was superior to the nasal half. It is suggested that the entrance of the optic nerve into the nasal half might help to account for the inferiority of that half. The authors further suggest that the superiority of the two halves simultaneously over either half stimulated separately might be evidence of interaction of the two cerebral hemispheres.—H. W. Karn (Clark).

1591. Turville, A. E. Visual equilibrium. *Amer. J. Optom.*, 1935, 12, 1-8.—A description of a test designed to permit balancing of the visual acuity in both eyes under conditions of near-point fixation.—R. J. Beitel (Clark).

1592. Verrier, M. L. Dualité de la vision et comportement. (Duality of vision and behavior.) *Bull. Soc. zool. Fr.*, 1934, 59, 366-374.—Remarks on day and night vision.—M. H. Piéron (Sorbonne).

1593. Weinstein, L. Ueber die Beschaffenheit der Wehentätigkeit beurteilt mit dem "Hysterotonographen." (The nature of painful activity as determined with the "hysterotonograph.") Zürich: Leemann, 1934. Pp. 14.—R. R. Willoughby (Clark).

1594. Wolff, W. Induzierte Helligkeitsveränderung. (Induced brightness changes.) *Psychol. Forsch.*, 1934, 20, 158-194.—Observations of Hering and Exner on changes in brightness of a central field caused by changes in brightness of a surrounding field are corroborated and further investigated. When the brightness of a neighboring or surrounding field is changed the field (or central field) apparently changes in brightness in the opposite direction. Under certain conditions the objectively unchanged field is the only one to undergo phenomenal change. The laws of such "dynamic contrast" are similar to those of induced movement, and depend on the total configuration of the visual field.—J. F. Brown (Kansas).

1595. Zevort, M. Examens de vision. (Tests of vision.) *Bull. Soc. A. Binet*, 1934, No. 298, 85-89.—M. H. Piéron (Sorbonne).

[See also abstracts 1613, 1620, 1631, 1646, 1653, 1681, 1691, 1714, 1716, 1727, 1732, 1737, 1741, 1745, 1747, 1748, 1754, 1761, 1764, 1766, 1767, 1768, 1769, 1770, 1844, 1919, 1950, 1969, 1981.]

#### FEELING AND EMOTION

1596. Arrighini, A. L'educazione dei sentimenti. (The education of the sentiments.) Turin, Rome: Marietti, 1934. Pp. 231. 12 L.—The author presents philosophical theories and scientific observations on the development of the sentiments, their relation to personality, their transformation, education, and pathology.—R. Calabresi (Rome).

1597. Gordon, K. Device for demonstrating empathy. *J. exp. Psychol.*, 1934, 17, 892-893.—Eight photos consisting of front, rear and side views of a Mexican image with its arms in various upright positions are presented to the subject, who is asked to list the eight views as A, B, C, D, E, F, G, H. Starting with A he is told to write down the answer to the question: Is it the right arm or the left arm which the statue is lifting in the air? "Some persons show marked gesticulations before they can answer the question. Others show slight movements of the hands, and some, whose movement is not publicly perceptible, report that they were aware of the twitching of their muscles."—H. W. Karn (Clark).

1598. Gray, J. S. An objective theory of emotion. *Psychol. Rev.*, 1935, 42, 108-116.—This theory assumes that emotions are the "intense but temporary bodily behavior initiated by some sort of stimulation sufficient to bring about immediate action of the endocrines and a resultant change in blood chemistry, profound visceral activity, heightened muscle tonus, increased sensitivity, etc." "These physiological changes then stimulate the internal receptors and the organism feels emotional." Different emotional feelings are distinguished because blood chemistry differs so characteristically in different emotions. It is argued that this theory is more objective than that of James or that of Cannon.—A. G. Bills (Chicago).

[See also abstracts 1733, 1895, 2023.]

#### ATTENTION, MEMORY AND THOUGHT

1599. Dwelshauvers, G. L'étude de la pensée. Méthode et résultats. (The study of thought. Method and results.) Paris: Tequi, 1934.—The book contains 24 lectures given to students of philosophy. Historical material is given as well as discussions of the various types of thought. The last two chapters deal with thought and the image.—M. H. Piéron (Sorbonne).

1600. Irwin, F. W., Kauffman, K., Prior, G., & Weaver, H. B. On "learning without awareness of what is being learned." *J. exp. Psychol.*, 1934, 17, 823-827.—Elsewhere Thorndike and Rock have

offered evidence that "a satisfying after-effect could strengthen the connection which it followed and to which it belonged in cases where the learner did not know what the connection was." The authors question the value of this evidence because it rests on the assumption that lack of awareness of what is being learned is indicated by continued slow learning without a sudden increase in the percentage of successes. In the present paper evidence is presented which shows that when subjects are actually taught the distinction there is, in many cases, no indication whatever of a sudden increase in the percentage of successes. It is concluded that the experiments of Rock and Thorndike afford no evidence of learning without knowledge.—*H. W. Karn* (Clark).

1601. *Kollmann, D. Die Ebbinghaus'sche Kombinationsmethode.* (The Ebbinghaus combination method.) Budapest: Bard, 1933. Pp. 77.—(Not seen).

1602. *McGeoch, J. A. The direction and extent of intra-serial associations at recall.* *Psychol. Bull.*, 1934, 31, 717.—Abstract.—*J. F. Dashiell* (North Carolina).

1603. *Meenes, M. The relationship of the eidetic phenomenon to the after-image and to the memory image.* *Psychol. Bull.*, 1934, 31, 739.—Abstract.—*J. F. Dashiell* (North Carolina).

1604. *Melton, A. W. The final spurt in memorization curves as an artifact of the method used for averaging individual curves.* *Psychol. Bull.*, 1934, 31, 719.—Abstract.—*J. F. Dashiell* (North Carolina).

1605. *Morgan, C. L. Meaning versus repetition, recency, and effect in the determination of choices of alternative letters of a mental maze.* *J. exp. Psychol.*, 1934, 17, 839-846.—Experimental evidence has been obtained which, the author contends, warrants the following general conclusions: (1) Meaning as a result of perceived relations was the factor possessing the greatest influence in the determination of choices of alternative letters in the mental maze used in this study. (2) Individuals responded to the elements of the problem as they perceived these elements in relation to the scheme of the maze and to the further elements of progress and failure. (3) Learning is not prevented in a problem in which the combined effects of repetition, recency, and satisfaction or annoyance are presumably opposed to learning.—*H. W. Karn* (Clark).

1606. *Peterson, H. A. Some measurements of the effects of reviews.* *Psychol. Bull.*, 1934, 31, 719-720.—Abstract.—*J. F. Dashiell* (North Carolina).

1607. *Peterson, J. Aspects of learning.* *Psychol. Rev.*, 1935, 42, 1-27.—Experiments in perception, such as those of Stratton and Ewert in retinal image inversion, and that of Young in right-left ear inversion, show perception to depend not on fixed native factors but on an acquired cooperation of the organism as a whole, with emphasis on the motor adjustment. Perception is motor learning. The delayed recognition of this fact, together with the dogma of associationism that learning is the passive fusion of mental units,

have caused an undue emphasis to be placed on the mechanical repetition or "frequency" theory of learning. In opposition to this the author advanced, in 1916, his "completeness of response" principle. It assumes (1) overlapping of impulses from present and past stimulation and from responses, (2) mutual facilitations and inhibitions among them, with success of those adapted to the inner and outer conditions, (3) influence of sets and drives, and (4) gradual release of hold-over effects from successes, as with the "consummatory response." The organism is made the unit. One experimental test of the principle was that which proved that short blind alleys are eliminated more rapidly than long ones, and that rats learn relatively early to keep a forward direction in the maze after erroneous choices. Another test was obtained from the discovery of the backward elimination of blind alleys and the more frequent errors in the early part of a maze. The relation of the "completeness of response" theory to the "goal-gradient" theory, first advanced by Washburn and recently developed and expounded by Hull, is pointed out. The drawbacks in Thorndike's related theory of "effect" are emphasized.—*A. G. Bills* (Chicago).

1608. *Raffel, G. The effect of recall on forgetting.* *J. exp. Psychol.*, 1934, 17, 828-838.—"A list of familiar words was partially learned by four groups of 12 subjects. Under these conditions: (1) The typical curve of forgetting was found. (2) The effect of daily recall was to retard forgetting after the second day. (3) Under certain conditions, with recall on successive days, there was a statistically significant group increase in number of words remembered. (4) Reminiscence was found only in subjects who recalled the material on successive days. (5) Even where the total score did not show reminiscence, words were often reported for the first time after the first day. (6) The number of words reported for the first time decreased daily, except when there was a group rise in score. (7) Words were recalled without recognition. (8) Recall probably acts upon the learning material as a whole, and not upon the units that are reproduced."—*H. W. Karn* (Clark).

1609. *Testa, A. Individualità e immediatezza del concetto. Nuovi fondamenti logici.* (Individuality and the immediacy of the concept. New fundamentals of logic.) Genoa: 1933. Pp. 24. 3 L.—*R. Calabresi* (Rome).

1610. *Vivanti, L. I fenomeni precognitive. Bibliografia e cenno storico.* (Precognitive phenomena. Bibliography and historical review.) *Ric. psich.*, 1933. Pp. 44.—*R. Calabresi* (Rome).

1611. *Yu, T. H. Transfer of learning.* *Chung Hwa educ. Rev.* (Chinese), 1934, 22, No. 5, 33-51.—This paper reviews and criticizes the experimental work so far done on the problem of transfer of learning or training. 50 experiments, covering transfer in abilities of school-subjects (22) and in special mental abilities (28) are summarily tabulated, their experimental conditions, procedure, and results being given. The possibility and scope of transfer, theories of transfer of learning, as well as its applications to

education were briefly discussed.—*C.-F. Wu* (Nat. Res. Inst. Psychol., Shanghai).

[See also abstracts 1671, 1675, 1707, 1712, 2025.]

#### NERVOUS SYSTEM

1612. Arvanitaki, —, & Fessard, A. *Sur la possibilité d'une excitation thermique de certains nerfs.* (The possibility of a thermal excitation of certain nerves.) *C. R. Soc. Biol., Paris*, 1934, 117, 850-852. —Two factors make it difficult to use either cold or heat as excitants of nerve, one the difficulty of securing a sufficiently rapid change of the temperature of the preparation and the other the difficulty of strictly localizing this change. The authors used non-myelinated crustacean nerves, and they secured excitations by cold and warmth.—*M. H. Piéron* (Sorbonne).

1613. Bartley, S. H. *The time of occurrence of the cortical response as determined by the area of the stimulus object.* *Amer. J. Physiol.*, 1935, 110, 666-674. —Stimulus areas of from one to ninety degrees of visual angle (short flashes) were used to study the cortical potential response of rabbits. The implicit time (from stimulus to the peak of the first response potential) was plotted against stimulus area, and the resulting curves are shown not to be smooth. This lack of smoothness was interpreted as being the result of the stimulation of the retina by stray light from the stimulus area. The time for the cortical response to a small area was apparently shortened by stray light, indicating synchronization and facilitation at the thalamus. As evidence that a stimulus from the periphery of the retina may reach thalamic and cortical levels, it is noted that with a small light area flickering against a dark background, the dark field also flickers experientially.—*T. W. Forbes* (N. Y. Psychiatric Institute).

1614. Bourguignon, G. *Les trois chronaxies vestibulaires et les trois canaux semi-circulaires chez l'homme normal.* (The three vestibular chronaxies and the three semicircular canals in the normal man.) *C. R. Ass. franç. Av. Sci.*, 1933, 57, 374-382. —Having observed by accident in pathological cases another movement than that of lateral inclination to a continuous electric current, the author endeavored to find whether one could normally obtain front-back and rotation movements with stronger currents, the rheobase alone being different. This was successful, and the author was able to find 3 chronaxies corresponding to the excitation of the 3 canal systems.—*M. H. Piéron* (Sorbonne).

1615. Bourguignon, G. *Double inclinaison et double chronaxie vestibulaire par excitation mono-auriculaire chez l'homme.* (Double inclination and double vestibular chronaxy in monaural excitation in man.) *C. R. Soc. Biol., Paris*, 1934, 117, 1289-1292. —In each labyrinth of the normal subject there exist two chronaxies, corresponding to the directions of head inclination. Studies of subjects with unilateral labyrinthine lesions show that the obtained

movement results from a nervous excitation and not from a movement of fluid. A unilateral labyrinthine or 8th nerve lesion affects the organ on the normal side, the excitation of the normal organ determining the inclination on the side of the lesion.—*M. H. Piéron* (Sorbonne).

1616. Bremer, F., & Moldaver, J. *Etude pharmacologique de la courbe de sommation centrale chez la grenouille spinale.* (A pharmacological study of the curve of central summation in the spinal frog.) *C. R. Soc. Biol., Paris*, 1933, 112, 727-730. —The curve of summation, when the extent of the response aroused by two consecutive electrical stimuli is considered as a function of the interval between the stimuli, is not modified by narcotics which depress the excitability of the reflex. The contrary is the case with the barbiturics (especially veronal), which decrease the reflex efficiency of stimuli which are separated by large temporal intervals.—*M. H. Piéron* (Sorbonne).

1617. Brunetti, C. *Interventi sul simpatico cervicale.* (Interventions in the cervical sympathetic.) *Arch. Soc. Ital. Chir.*, 1934, 40, 70-71. —The author has observed amelioration of certain syndromes of labyrinthine origin following intervention in the cervical sympathetic. He concludes that there are relationships between the cervical and pharyngeal hypophyses and the third amygdale.—*R. Calabresi* (Rome).

1618. Buzzard, E. F. *Hughlings Jackson and his influence on neurology.* *Lancet*, 1934, 227, 909-913. —The Schorstein lecture.—*D. J. Ingle* (Mayo Foundation).

1619. Cantele, P. G. *Vertigini ed interventi sul simpatico cervicale.* (Vertigo and interference with the cervical sympathetic.) *Valsalva*, 1934, 10, 455-456.—*R. Calabresi* (Rome).

1620. Ceni, C. *I disturbi visivi nella diagnosi topografica delle lesioni cerebrali.* (Visual disorders in the topographic diagnosis of cerebral lesions.) *Bologna: Zanichelli*, 1934. Pp. 35. 10 L.—*R. Calabresi* (Rome).

1621. Collier, J. *Inventions and the outlook in neurology.* *Lancet*, 1934, 227, 855-859. —This paper was delivered before the Royal College of Physicians of London as the Harveian Oration. It is a discussion of the lives and "inventions" (contributions) of Gall, Purkinje, Prochaska, Hughlings Jackson, Todd, Quincke, and Economo. "The psychiatrist struggles with the most difficult burden of advance almost alone. Neither anatomist, physiologist, virus worker, or biochemist has as yet done anything material to clear the path for his progress. . . . Just as the highest functions of the nervous system allow of no physiological or anatomical analysis, so do its disorders at present admit no pathological and causal conception." —*D. J. Ingle* (Mayo Foundation).

1622. Culler, E. *Conditioned behavior in a decorticate dog.* *Psychol. Bull.*, 1934, 31, 729-730. —Abstract.—*J. F. Dashiell* (North Carolina).

1623. Delmas-Marsalet, P. *La cocainisation des labyrinthes du chien et les effets expérimentaux.* (The cocainization of the labyrinths of the dog and its experimental effects.) *C. R. Soc. Biol., Paris*, 1934, 117, 56-57.—The author sought to study systematically the relations which certain parts of the brain may have with the labyrinths. The labyrinth was temporarily anesthetized, without destruction, by the injection of 1 cc. of a 5% solution of cocaine. It is probable that the toxic substance penetrates the endolymph by osmosis through the round and oval windows.—*M. H. Piéron* (Sorbonne).

1624. Delmas-Marsalet, P. *Asymétrie des paralysies labyrinthiques droite et gauche chez le chien dont un lobe préfrontal est lésé.* (Asymmetry of right and left labyrinthine paralyses in a dog with a unilateral prefrontal lesion.) *C. R. Soc. Biol., Paris*, 1934, 117, 58-60.—The destruction of a prefrontal region causes asymmetrical effects of the cocainization of the labyrinths. The prefrontal lobe and the homolateral labyrinth affect in similar ways the active movements and the postures of the neck and back. The prefrontal lobe and the heterolateral labyrinth work in the same direction with reference to tonus and the coördination of the legs on the side opposite to the frontal lesion.—*M. H. Piéron* (Sorbonne).

1625. Delmas-Marsalet, P. *La cocaine agent sensibilisateur des troubles préfrontaux du chien. L'antagonisme cocaine-bulbocapnine.* (Cocaine as a sensitizing agent in prefrontal disorders in the dog. The cocaine-bulbocapnine antagonism.) *C. R. Soc. Biol., Paris*, 1934, 117, 227-228.—In the case of an important prefrontal lesion, the addition of cocaine intoxication accentuates the disorders, particularly the tendency to turn toward the side of the lesion, a turning which involves equilibratory movements, ataxia, and asymmetry of the opposed legs which may lead to falls. Cocaine thus seems to reinforce prefrontal disorders.—*M. H. Piéron* (Sorbonne).

1626. Eichler, W. *Die electrotonische Erregbarkeitsänderung in Abhängigkeit von der Art des Prüfreizes und von der Temperatur.* (Changes of electrotonic excitability as a function of the kind of test stimulus and of the temperature.) *Z. Biol.*, 1933, 93, 527-540.—(*Biol. Abstr.* VIII: 20025).

1627. Eichler, W. *Die Latenzzeit des Nerven im Elektrotonus.* (The latent time of nerve in electrotonus.) *Z. Biol.*, 1933, 93, 541-546.—(*Biol. Abstr.* VIII: 20026).

1628. Gelli, G. *Alcalosi e cronassia della corteccia cerebrale.* (Alkalosis and chronaxy of the cerebral cortex.) *Boll. Soc. Ital. Pediat.*, 1934, No. 2, 170.—*R. Calabresi* (Rome).

1629. Gentile, G. *Ricerche sperimentali sull'azione della bulbocapnina sul sistema nervoso.* (Experimental researches on the action of bulbocapnina on the nervous system.) *Tesi di laurea premiata* Lepetit, 1933, 125-149.—*R. Calabresi* (Rome).

1630. Gurwitsch, A. *L'excitation mitogénétique du système nerveux central.* (The mitogenetic excitation of the central nervous system.) *Ann.*

*Physiol. Physicochim. biol.*, 1934, 10, 1151-1165.—The author states that the illumination of the frog's eye with white light arouses mitogenetic radiations in the optic lobes and the hemispheres. This radiation is not a secondary phenomenon. It has its origin in the parts of the brain concerned, where it is developed by an excitatory state of unknown origin.—*M. H. Piéron* (Sorbonne).

1631. Gurwitsch, A. *L'excitation mitogénétique du système nerveux pendant l'éclairage de l'œil.* (Mitogenetic excitation of the nervous system during the illumination of the eye.) *Ann. Physiol. Physicochim. biol.*, 1934, 10, 1166-1169.—The illumination of the eye both with colored and with white light arouses a mitogenetic radiation in the optic nerve, the optic lobes, the hemispheres and the medulla. The spectral analysis of this radiation aroused by the illumination of the eye by three monochromatic spectral colors (red, blue, green) gives a spectrum characteristic of each light quality. The author supposes that these spectral differences may reveal the qualitative differences of the excitations of the cerebral cortex.—*M. H. Piéron* (Sorbonne).

1632. Hoff, E. C., Hoff, H. E., & Sheehan, D. *Reflex interruptions of rhythmic discharge.* *J. Physiol.*, 1934, 83, 185-192.—A reflex discharge produced by a tendon tap interrupts rhythmically discharging soleus motor neurons in the cat. This effect is identical with that produced by an antidromic volley upon similar rhythms. The theory of rhythmic discharge is discussed and it is suggested that, in addition to discharge caused by the summation of impulses from widely separated points on the cell ("boutons terminaux"), the motor neuron may be activated by a propagated disturbance originating from a small area of intense stimulation.—*M. A. Rubin* (Clark).

1633. Holzlöhner, E., & Airapetian, E. *Die Drüsentätigkeit bei Nervenreizung. III. Die Wirkung der Sympathikusreizung auf die Glandula submaxillaris und ihr Einfluss auf den Chordaeffekt.* (Glandular activity in nerve stimulation. III. The effect of sympathetic stimulation on the submaxillary gland and its influence on the chorda effect.) *Z. Biol.*, 1933, 93, 491-506.—(*Biol. Abstr.* VIII: 20034).

1634. Jasper, H. H., & Bonvallet, M. *Rôle de l'écorce dans l'organisation asymétrique des chronaxies des nerfs symétriques chez les droitiers ou gauchers.* (The role of the cortex in the asymmetrical organization of the chronaxies of the symmetrical nerves of the right- or left-handed.) *C. R. Soc. Biol., Paris*, 1934, 117, 991-994.—It is generally admitted that, with rats and guinea pigs, the phenomena of subordination are not manifested identically in symmetrically located nerves. This asymmetry varies with the behavior of right- and left-handedness. Experiments show that right- and left-handed rats may be precisely characterized by the measure of motor chronaxy of the flexors and extensors of the four legs. The schema of the right-handed rat is the mirror image of that of the left-handed one. The authors have also shown that the chronaximetric in-

dications of a functional asymmetry may be inverted and so reveal the chronaximetric dominance of the opposite side by the suppression of the activity of the dominant hemisphere involved. This is done either by the application of cocaine or by the ablation of a certain part of the cortex which, according to Patterson, controls right- or left-handed behavior in the rat.—*M. H. Piéron* (Sorbonne).

1635. *Lasley, K. S. Integrative functions of the cerebral cortex.* *Physiol. Rev.*, 1933, 13, 1-42.—*(Biol. Abstr. VIII: 20038).*

1636. *Lenaz, L. Parkinsonismo e la fisiopatologia dell'apparato extrapiramidale.* (Parkinsonism and physiopathology of the extrapyramidal apparatus.) *G. veneto Sci. med.*, 1934, No. 6, 658-659.—The corpus striatum is considered the principal organ controlling locomotion. The author denies that the cerebellum controls muscle tonus. He also rejects the hypothesis of a striate origin of choreic movements, which he regards as a result of reflex excitation of the cortex.—*R. Calabresi* (Rome).

1637. *Marchionini, A. Pathologische Beziehungen zwischen Haut und Nervensystem.* (Pathological relationships between skin and nervous system.) *Fortschr. Neurol. Psychiat.*, 1934, 6, 481-488.—This article deals with the important investigations in the field of dermatoneurology during 1933 and the first half of 1934. The article is divided into sections designated Pathogenesis, Clinical, and Therapy. The first section contains discussions of the work of Aubrun on hyperesthesia as a consequence of nerve severing; Gryzbowski on skin innervation; and Rapaport on the sweat secretion of the face. Under the heading Clinical, the work of New and Kirch (Mayo clinic) concerning permanent enlargements of the lips and face, an investigation wherein 67 patients between the ages of 4 and 54 were observed, is reported. The therapy in this particular investigation consisted mainly in radium treatments. The section designated Therapy contains reports of treatment by lumbar sympathectomy, by pilocarpin, and by radium. There is a bibliography.—*D. S. Oberlin* (Newark, Del.)

1638. *Mondio, E. Azione della bulbocapnina direttamente applicata sui centri nervosi.* (Action of bulbocapnina applied directly to the nervous centers.) *Riv. Patol. sper.*, 1934, 12, 131-140.—*R. Calabresi* (Rome).

1639. *Neri, V., Borgatti, —, & Scaglietti, —. Recherches expérimentales sur le mécanisme par lequel l'excitation de l'infundibulum produit le sommeil.* (Experimental researches on the mechanism by which excitation of the infundibulum produces sleep.) *Rev. neurol.*, 1934, 41, 909-912.—The authors performed an experiment with crossed circulation on two dogs, one of which was put to sleep by pricking the infundibulum. The other dog made no reaction. This finding permits the authors to reject an hormonal mechanism as well as a vasomotor one. The sleep reaction is immediate in the animal concerned. It seems that one may find in this experiment the proof of a purely nervous action.—*M. H. Piéron* (Sorbonne).

1640. *O'Leary, J., Heinbecker, P., & Bishop, G. H. Analysis of function of a nerve to muscle.* *Amer. J. Physiol.*, 1935, 110, 636-658.—By means of the photographic fiber-counting technique and cathode-ray recording, the characteristics of the small efficient fibers to skeletal muscle were studied. The medial head of the gastrocnemius of the cat was used and tension was recorded by isotonic myograph. The effect of stimulating the small-fiber motor group was too small, if any, to be detected in the presence of the effect of stimulating the fibers of lower threshold and larger size. Fiber size in the nerves to the extrinsic muscles of the eye (no spindles) was determined in an attempt to see whether these small fibers might be motor to muscle spindles. It is tentatively inferred that such is the case. Besides pressure and pain, reflex vasomotor and respiratory effects were obtained by afferent stimulation, but the separability of these fibers from sensory fibers is not demonstrated. Stimulation of the large efferent fibers above the range of pain fibers in a branch innervating the gastrocnemius results in release of tonus if this is present in the gastrocnemius; otherwise this has no effect on tension; stimulation of fibers in the size range of pain fibers results in contraction, in lightly anesthetized cats. The same procedures produce reversed effects in the quadriceps extensor, except that if the strength and frequency are sufficient spasmotic contractions of all the muscles in this vicinity obscure the simple coordination. To analyze adequately reflexes involving muscles and to differentiate between those of postural coordination and those of tonic or spastic character, the functional content of the afferent nerves involved, and the strength and frequency of stimulation as determinants of the afferent effect, are essential data.—*T. W. Forbes* (N. Y. Psychiatric Institute).

1641. *Piéron, H. La chronaxie vestibulaire peut-elle servir à l'exploration fonctionnelle du labyrinthe?* (Can vestibular chronaxy serve in the exploration of labyrinthine function?) *Bull. Inst. nat. Orient. prof.*, 1934, 6, 92-95.—The article contains criticisms and observations on the work of Silvio Princigalli relative to vestibular chronaxy as applied particularly to the selection of aviation personnel.—*M. H. Piéron* (Sorbonne).

1642. *Rijlant, P. Courants d'action du nerf pneumogastrique.* (Action currents of the pneumogastric nerve.) *C. R. Soc. Biol., Paris*, 1933, 112, 1225-1229.—*M. H. Piéron* (Sorbonne).

1643. *Rijlant, P. Courant d'action du système nerveux orthosympathique.* (Action currents of the orthosympathetic nervous system.) *C. R. Soc. Biol., Paris*, 1933, 112, 1229-1233.—*M. H. Piéron* (Sorbonne).

1644. *Roncoroni, L. Funzioni psichiche e base anatomica.* (Psychic functions and anatomical bases.) *G. Clin. med.*, 1934, 15, 407-422.—The elementary functions related to afferent and efferent impulses are localized in the focal and association areas of the cerebral cortex.—*R. Calabresi* (Rome).

1645. *Sarkissov, S. A. [The bioelectric current of the brain cortex.] Sovetsk. Nevropatol.*, 1934, 3, No.

10, 1-9.—The method of registration of the bioelectric current in connection with the modern doctrine of brain architectonics is a new and very interesting method for solving the problem of localization of the bioelectric differentiation of various brain areas corresponding to its structural difference. The possibility of registration of the bioelectric brain current through the skull bones in the normal state and in cortex lesions is very promising.—A. Yarmolenko (Leningrad).

1646. Squires, P. C. The problem of auditory bilateral cortical representation with special reference to Dandy's findings. *Psychol. Bull.*, 1934, 31, 751-752.—Abstract.—J. F. Dashiell (North Carolina). [See also abstracts 1547, 1565, 1662, 1680, 1690, 1719, 1723, 1739, 1742, 1743, 1746, 1749, 1750, 1751, 1758, 1774, 1775.]

#### MOTOR PHENOMENA AND ACTION

1647. Balduzzi, O. Die Stützreaktionen beim Menschen in physiologischen und pathologischen Zuständen. (The support reactions in man in physiological and pathological conditions.) *Z. ges. Neurol. Psychiat.*, 1932, 141, 1-29.—(Biol. Abstr. VIII: 20016).

1648. Barcroft, J., Elliott, R. H. E., Flexner, L. B., Hall, F. G., Herkel, W., McCarthy, E. F., McClurkin, T., & Talaat, M. Conditions of fetal respiration in the goat. *J. Physiol.*, 1934, 83, 192-215.—The difference between the oxygen dissociation curves for mother and fetus is explained by the change of hydrogen-ion concentration in the mother and by the fetal hemoglobin, which has different properties from that of the mother.—M. A. Rubin (Clark).

1649. Behnke, A. R., Johnson, F. S., Poppen, J. R., & Motley, E. P. The effect of oxygen on man at pressures from 1 to 4 atmospheres. *Amer. J. Physiol.*, 1935, 110, 565-572.—Oxygen (97 to 99%) was breathed through the mask of the Benedict apparatus at one, two, three and four atmospheres pressure. Attention and co-ordination as measured by the Miles pursuit meter were disturbed in three out of four subjects after one to three hours under one atmosphere. At four atmospheres convulsions occurred in one subject, followed by stupor and sleep, while in a second subject syncope occurred after 45 minutes of oxygen, with immediate and complete recovery on breathing air. Symptoms were referable mainly to the nervous system.—T. W. Forbes (N. Y. Psychiatric Institute).

1650. Benedict, F. G. Degree of constancy in human basal metabolism. *Amer. J. Physiol.*, 1935, 110, 521-530.—The basal metabolism of one "well-conditioned" subject (F.G.B.) was studied with the closed-circuit apparatus in 1932 and with open-circuit equipment in 1933. The respiratory quotient and weight loss (Sauter balance) were determined in the 1933 study. All measures were taken 12 hours after the last meal, and a response to a light stimulus and later to a buzzer stimulus were used to guard against drowsiness. Immediately after the metabolic de-

termination notes were dictated concerning meals, sleep, and subjective impressions during the experiment. The range of oxygen consumption was from 223 to 237 cc., with an average of 232 cc. and an average deviation of 1%. Oxygen consumption and insensible perspiration corresponded well on a basis of heat production computed for each. In general, the body temperature, pulse and respiration rates, respiratory quotient, oxygen consumption, and insensible perspiration were extraordinarily constant from day to day, but the writer cautions against the use of a single basal determination for correlation with other variables, as has been done at times in experimental studies. An intense emotional disturbance during the studies caused an increased metabolism which did not subside for several days.—T. W. Forbes (N. Y. Psychiatric Institute).

1651. Blumgart, H. L., & Davis, D. Hypothyroidism induced by complete removal of the normal thyroid gland in the treatment of chronic heart disease. *Endocrinology*, 1934, 18, 693-700.—Complete thyroidectomy was performed in 75 patients with heart disease with the object of decreasing demands on the heart. Small amounts of thyroid extract were administered to prevent the development of advanced myxedema, but a permanent state of hypothyroidism was allowed to exist. "Although speech is somewhat slowed, psychological tests have shown that mental acuity is not impaired in those patients whose myxedematous state is controlled." Fatigue, drowsiness, and irritability were occasional symptoms.—D. J. Ingle (Mayo Foundation).

1652. Bocchi, C. La psiche e i tratti del viso. (The psyche and the traits of the face.) Milan: Gorlini, 1934. Pp. 131. 7 L.—R. Calabresi (Rome).

1653. Bourguignon, G. Variations extemporanées de la chronaxie sous l'influence de la douleur provoquée dans le rhumatisme chronique. (Extemporaneous variations of chronaxy under the influence of the pain aroused in chronic rheumatism.) *C. R. Acad. Sci., Paris*, 1934, 199, 381-382.—In chronic rheumatism there is no variation of the chronaxy which has a humoral origin. When there is a reflex muscular atrophy, an augmentation of chronaxy by percussion is observed. All painful positions always cause an instantaneous increase or decrease of the chronaxy of the muscles of the segment involved in the painful position.—M. H. Piéron (Sorbonne).

1654. Bourguignon, G. Variation de la chronaxie d'un muscle pendant la contraction volontaire de ses antagonistes chez l'homme normal. (The variation of the chronaxy of a muscle during the voluntary contraction of its antagonists in the normal human subject.) *C. R. Acad. Sci., Paris*, 1934, 199, 489-491.—In his investigations of the influence of posture in man, the author has never found the least variation of the chronaxy of a muscle as a result of the position of the member or of a segment of the member under conditions where the subject is quite relaxed, allowing himself to be put passively into positions of flexion or extension. The voluntary contraction of a muscle does not affect its chronaxy, but the voluntary con-

traction of its antagonists does modify it. This action is of cerebral and not of reflex origin, demonstrating the influence of centers upon chronaxy.—*M. H. Piéron* (Sorbonne).

1655. Brainess, S. N. [The problems of fatigue and activity and mitogenetic rays.] *Arkh. biol. Nauk*, 1934, 35, 325-340.—On a series of clinical cases the author shows that the mitogenetic blood radiation is proportional to the sensations of hypo- and hyperactivity, and these sensations reflect a physiological reality. The experiments with infusion of blood with a high mitogenetic intensity showed the restoring influence of this blood. The decrease of the metabolism and the disturbance in the sulphur exchange observed in psychotic patients can be influenced by the new method proposed by the author.—*A. Yarmolenko* (Leningrad).

1656. Bremer, F., & Moldaver, J. Etude du phénomène de la fatigue nerveuse centrale. (Study of the phenomenon of central neural fatigue.) *C. R. Soc. Biol., Paris*, 1933, 112, 730-733.—Central fatigue, as represented by a decrease in the height of the reflex response after a maximal contraction, decreases as a function of that interval. Inadequate stimulations do not result in fatigue.—*M. H. Piéron* (Sorbonne).

1657. Bronk, D. W., & Ferguson, L. K. The nervous control of intercostal respiration. *Amer. J. Physiol.*, 1935, 110, 700-707.—Bursts of impulses from the internal and external intercostal muscle innervation were recorded from the cut nerves. A rhythmic discharge of motor impulses continues when afferent impulses resulting from respiratory movements are eliminated, and the normal reciprocal character of the activity is likewise maintained.—*T. W. Forbes* (N. Y. Psychiatric Institute).

1658. Cason, H. Dr. Hilgard on the conditioned eyelid reaction. *J. exp. Psychol.*, 1934, 17, 894-899.—A criticism of some aspects of Hilgard's recently published study of conditioned eyelid reactions to a light stimulus based on the reflex wink to sound. The author contends: (1) that because of Hilgard's interest in twitches of the eyelid he may have missed important organic principles which apply only to complete eyelid reactions; (2) that there is a failure to make a clear distinction regarding the relationships between conditioned and voluntary responses; (3) that differences in conditions and methods may have been the cause of the significant differences between the earlier published findings of Cason and those of Hilgard; (4) that the results of Hilgard's experiment on one subject presented in the section of his monograph entitled *The Minimum Latency of Conditioned Eyelid Reactions to Light* are inconclusive and misleading.—*H. W. Karn* (Clark).

1659. Chang, I. The present status of the problem of learning. *Educ. Rev. (Chinese)*, 1934, 24, No. 2, 79-93.—This paper reviews and discusses the 3 conflicting systematic theories of learning, viz., Thorndike's theory of "learning by trial and error" and his laws of exercise and effect, the behaviorist's (notably Watson's) "principle of conditioning," and Koffka

and Köhler's Gestalt theory of learning.—*C.-F. Wu* (Nat. Res. Inst. Psychol., Shanghai).

1660. Clark, G. A. The development of blood-pressure reflexes. *J. Physiol.*, 1934, 83, 229-236.—It is found that the functional activity of vasomotor reflexes does not appear in the cat or dog until after birth. The author suggests that the change in fetal blood-pressure which occurs with each uterine contraction may be the result of obstruction in the placental circulation at the height of the uterine contraction.—*M. A. Rubin* (Clark).

1661. Delmas-Marsalet, P. Effets de la bulbocapnine sur les phénomènes labyrinthiques du chien. (Effects of bulbocapnine on the labyrinthine phenomena of the dog.) *C. R. Soc. Biol., Paris*, 1934, 117, 228-230.—A dog with its head in a horizontal position is held in a Barany chair and given strong rotations, with the following results: (1) A horizontal nystagmus ensues, with the saccadic movement opposed to the direction of rotation. (2) This is followed by a rotation of the neck, horizontal movements of equilibrium, and a deviation of the anterior legs in the direction of rotation. If bulbocapnine is injected, the normal nystagmus and rotation of the neck occur, but the equilibratory movements are suppressed, as are also, at times, the deviations of the anterior legs. The author believes that the different behavior phenomena aroused by the rotational excitement of the labyrinths goes to different levels of the nervous system and that bulbocapnine acts only at the particular level controlling equilibratory movements.—*M. H. Piéron* (Sorbonne).

1662. Drabovitch, W., Chauchard, A., & Chauchard, B. Réflexes conditionnés et chronaxie. (Conditioned reflexes and chronaxy.) *C. R. Acad. Sci., Paris*, 1934, 198, 1718-1721.—The formation of a conditioned reflex seems to imply an effect upon peripheral chronaxy.—*M. H. Piéron* (Sorbonne).

1663. Efimov, V. V. [The influence of work, fatigue and rest on the Gourvitch blood rays.] *Arkh. biol. Nauk*, 1934, 35, 157-168.—*A. Yarmolenko* (Leningrad).

1664. Fedorov, V. K., & Vedeneev, K. M. [The most primitive displays of the complex unconditioned reflexes (instincts) in dementia praecox.] *Arkh. biol. Nauk*, 1934, 34, 532-557.—The cases of dementia praecox with temporary or stationary exclusion of cortical activity display subcortical unconditioned complex reflexes (instincts) in their most primitive forms. These reflexes depend upon the degree of exclusion of the cortex, and can be explained as based on inductive relations of the cortex and the subcortical centers. It appears as if dementia praecox takes off various strata of the central nervous system, denuding its more primitive functions.—*A. Yarmolenko* (Leningrad).

1665. Feige, K. Präzisionsleistungen menschlicher Motorik. (Motor performances of precision in human subjects.) *Beih. Z. angew. Psychol.*, 1934, No. 69, Pp. 88.—The purpose of this investigation was to examine the variability of certain every-day rhyth-

mical activities like walking and especially of competitive sports activities like running, swimming, high jump, ski jumping and shooting. The performances were analyzed as regards their temporal and spatial variations and some also as regards their achievement. The remarkably high constancy of these performances does not seem to have a voluntary basis, but is determined by the body as a total mechanism. "The human organism under certain conditions arrives at a uniform mode of performance by itself, that is, unconsciously or involuntarily"; and this performance is also the most economical one under the existing conditions. 54 references.—K. F. Muenzinger (Colorado).

1666. Gasparrini, O. Studio fisico sul labirinto umano considerato come organo del senso dell' equilibrio. Il nistagmo provocato da sensazioni labirintiche. (Physical studies on the human labyrinth considered as the sense organ for equilibrium. Nystagmus aroused by labyrinthine sensations.) *Valsalva*, 1934, 10, 389-440.—The author investigated the pressure exercised by the weight of the endolymph upon the neuro-epithelium of the semi-circular canals and gave an exact measure of it. From a study of the variations of the pressure with different inclinations of the head, the author showed that this pressure is the stimulus for the labyrinth as an organ of equilibrium. The receptors of the lateral and superior canals seem to regulate the reflexes of lateral inclination, while the posterior canals regulate the reflexes of forward and backward inclinations. In these functions the whole labyrinth is active. The author criticizes severely the notion of endolymph currents as an explanation of nystagmus. Nystagmus is a counter-rotation of the eyes in relation to an illusory movement of the head, and is aroused by abnormal excitation.—R. Calabresi (Rome).

1667. Gayet, R., & Guillaume, M. Recherches sur les inhibitions réflexes de la sécrétion pancréatique par stimulation des nerfs sensitifs. (Experiments on the reflex inhibitions of the pancreatic secretion aroused by stimulation of sensory nerves.) *C. R. Soc. Biol., Paris*, 1933, 112, 1058-1062.—The authors, using dogs with temporary fistulas, have verified Pavlov's finding that dogs with permanent fistulas will have the flow of pancreatic juice arrested by the stimulation of any sensory nerve.—M. H. Piéron (Sorbonne).

1668. Gilbert, R. W., & Crafts, L. W. The effect of signal for error upon maze learning and retention. *Psychol. Bull.*, 1934, 31, 718.—Abstract.—J. F. Dashiell (North Carolina).

1669. Hilgard, E. R. The latency of conditioned eyelid reactions: a reply to Dr. Cason. *J. exp. Psychol.*, 1934, 17, 899-908.—It is contended that Cason in his criticism of the author's study on conditioned eyelid reactions to a light stimulus based on the reflex wink to sound has failed to account for the chief point of disagreement—the latency of conditioned responses as compared with the latency of voluntary responses. "In Dr. Cason's study, responses of extremely low latency (some preceding the stimulus,

some of latency less than that of the shortest reflex response) occurred only among the conditioned reactions to sound and entered into the calculations. Such short latency responses never appeared among the responses of reflex nature to the sound-shock combination, or in voluntary responses to the same sound." It is the author's belief, therefore, that the data are unsuitable for a comparison of the latency of conditioned and voluntary responses, and, in consequence, that Cason's results are indeterminate.—H. W. Karn (Clark).

1670. Hilgard, E. R. The retention of conditioned responses. *Psychol. Bull.*, 1934, 31, 716.—Abstract.—J. F. Dashiell (North Carolina).

1671. Hsiao, H. H. Three major problems in the psychology of learning. *Educ. Rev. (Chinese)*, 1934, 24, No. 1, 113-121.—Motivation, trial-and-error versus insight, and transfer of learning are the three problems discussed in this paper. (1) The author points out the weaknesses of the present-day study of the motivation problem and urges that care must be taken of the following points, viz., (a) difference between human and lower animals in motivation, (b) position of the secondary and primary motives, (c) analysis of simple as well as complex motives, and (d) cooperation and conflict among various motives. (2) According to the author, all types of learning begin largely with "learning by trial-and-error" and are then followed by "learning by insight." The varying proportions of these two factors depend upon the difficulty or ease of the experimental (learning) situation in question. Thus, Thorndike's theory of "learning by trial-and-error" and Köhler's theory of "learning by insight" are not fundamentally contradictory. (3) The author believes that transfer of learning is possible. Concerning the 3 theories of transfer, Judd's theory of generalization is considered to be more acceptable than both Thorndike's theory of identical elements and the Gestalt theory of functional similarity. But the author suggests that "similarity of demand" would be a better hypothesis to explain transfer of learning.—C.-F. Wu (Nat. Res. Inst. Psychol., Shanghai).

1672. Hull, C. L. The alleged inhibition of delay in trace conditioned reactions. *Psychol. Bull.*, 1934, 31, 716-717.—Abstract.—J. F. Dashiell (North Carolina).

1673. Kobra, H. Beobachtungen des Stapedius-reflexes am Menschen. (Observations on the stapedius reflex in man.) *Z. Hals- Nas.- u. Ohrenheilk.*, 1932, 32, 8-22.—(Biol. Abstr. VIII: 20005).

1674. Korins, M. A study in eye-hand coordination. *J. exp. Psychol.*, 1934, 17, 878-884.—The purpose of this investigation was to determine to what extent individuals differ in one form of motor ability and upon what basis the differences rest. A triangular form board having holes in the corners 5 mm. in diameter and 15 cm. apart was used. A stylus, held like a lead pencil, was to be inserted as rapidly as possible into the holes in a clockwise order. Three groups of subjects were used. Group A consisted of athletes who participated in sports which involved

eye-hand coordination. Group B consisted of athletes who participated in sports not involving the coordination of eye and hand. Group C was made up of non-athletes. An analysis of the scores made by these groups leads the author to conclude that beside such factors as new knowledge, new technique, better adjustment, etc., the constitutional nature of the motor and neural mechanisms of the subject will determine improvement in eye-hand coordination.—*H. W. Karn* (Clark).

1675. Korngold, S. Contribution à l'étude de la dextralité. (Contribution to the study of dexterity.) *Bull. Inst. nat. Orient. prof.*, 1934, 6, 1-8; 29-33.—Dexterity appears to increase with development. The habitual activity of the right hand not only increases the skill of this hand, but also has a similar influence on the activities of the left hand. In general dull subjects are more than usually ambidextrous, independently of age and social influences.—*M. H. Piéron* (Sorbonne).

1676. Kupalov, P. S., & Ushakova, A. M. K voprosu o lokalizatsii differentsirovochnogo tor-mozhnenii. (Concerning the localization of differential inhibition.) *Arkh. biol. Nauk*, 1931, 31, 429-431. —(*Biol. Abstr.*, VIII: 20035).

1677. Langlie, T. A. Perseveration and non-adjustive reactions. *Psychol. Bull.*, 1934, 31, 726.—Abstract.—*J. F. Dashiell* (North Carolina).

1678. Lepley, W. M. A gradient in incidental learning. *Psychol. Bull.*, 1934, 31, 717-718.—Abstract.—*J. F. Dashiell* (North Carolina).

1679. Lianda, V. Correlations of animal and vegetative reactions (experimental data). *J. exp. Psychol.*, 1934, 17, 862-877.—The investigation was conducted by two motor reflexological methods: the electrodermal and the grasping method. During the experiments the galvanic and respiratory reactions were recorded side by side with the local motor reactions. The experiments by the electrodermal method were conducted by training of the associated motor reflex to a color stimulus as well as its differentiation. The experiments by the grasping method, consisted also of training of the associated motor reflexes (a grasping motion of the arm and the snatching of a ball) to a color stimulus, and the establishing of a differentiation. An analysis of the data leads to the following conclusions: (1) The strength of the galvanic reflex to currents and to color stimuli varies widely in different subjects. (2) The strength of the galvanic reflex is higher to currents than to color stimuli. (3) There is a considerable increase of the strength of the galvanic reflex to the associated stimulus as compared with the differentiated. (4) There is an inverse correlation between the strength of the galvanic reflex to currents and the maximal limits of the electrodermal sensibility. (5) The same stimulus has a different effect on the reacting system (galvanic) according to the general situation. (6) A certain relation between the reactivity of the respiratory and galvanic sections of the vegetative system was established on the material investigated. (7) The respiratory irritability is more marked in the motor-excited

group than in the other one. (8) A stronger general vegetative irritability was observed in the presence of an associated-motor excitability than in its absence. (9) The associating nature of the vegetative reactions is observed more frequently in the presence of an associated-motor irritability than in its absence.—*H. W. Karn* (Clark).

1680. Loucks, R. B. Conditioning upon the basis of faradization of the cerebral cortex. *Psychol. Bull.*, 1934, 31, 728.—Abstract.—*J. F. Dashiell* (North Carolina).

1681. Marquis, D. G. Visual conditioned responses in dogs after removal of the striate cortex. *Psychol. Bull.*, 1934, 31, 729.—Abstract.—*J. F. Dashiell* (North Carolina).

1682. Metalnikov, S. Rôle du système nerveux et des facteurs biologiques et psychiques dans l'immunité. (The role of the nervous system and of biological and psychic factors in immunity.) Paris: Masson, 1934. Pp. 166.—*M. H. Piéron* (Sorbonne).

1683. Miller, N. E. A reply to "sign-gestalt or conditioned reflex?" *Psychol. Bull.*, 1934, 31, 723-724.—Abstract.—*J. F. Dashiell* (North Carolina).

1684. Mitolo, M. Osservazioni sperimentali sul comportamento della meccanica respiratoria durante le letture verbale e mentale. (Experimental observations on the behavior of the mechanism of respiration during verbal and mental reading.) *Arch. Fisiol.*, 1934, 23, 414-428.—The author makes a contribution to the graphic analysis of the modifications of the respiratory mechanism, during reading, by observing the different thoracic regions in mental reading and in verbal reading with different voice pitches. The observed modifications are partly relative to the respiratory type of the subject, but they also give pneumographic curves which possess the following common characteristics: Some may be considered as phenomena of the whole thoracic region, while others pertain to specific regions. There is a lessening of frequency of respiration during reading, with an invariability of the tonus of inspiration and expiration. The duration of inspiration decreases while that of expiration increases. The lack of coordination in the curves is a specific character of the graphs obtained from the different thoracic regions, with the different kinds of reading. The principal differential character is the inversion of the pneumographic curve from the posterior part of the thorax in comparison with that from the apical regions. If reading very loudly involves a decrease in respiratory frequency, this is continued in normal reading, and one observes a new increase in frequency during whispered and mental reading.—*R. Calabresi* (Rome).

1685. Mollaret, O. Modifications des chronaxies des antagonistes sous l'influence de la posture locale et contre-latérale chez le chien. (Modifications of the chronaxies of antagonists under the influence of local and contralateral posture in the dog.) *C. R. Acad. Sci., Paris*, 1934, 199, 92-94.—There is an inversion of the relation of the chronaxies of the antagonists according to whether the legs are flexed or

extended. Numerous experiments show that this phenomenon fits into the general frame of nervous subordination and that it is always necessary to specify the position of segments of the members studied and even of the symmetrical segments.—*M. H. Piéron* (Sorbonne).

1686. Monnier, A. M. *Essai d'interprétation physique de l'excitation électrique des tissus.* (Attempt at a physical interpretation of the electrical stimulation of tissues.) Paris: Herman, 1934. Pp. 326.—A schema is given for the understanding of the different forms of electrical stimulation. For this, two essential hypotheses are deduced from experimental findings: (1) The current produces in all excitable substances a transitory phenomenon, or state of excitation, whose duration is characteristic for each tissue. This hypothesis is of the greatest importance, and reveals the significance of a time constant (chronaxy) in the speed of the phenomena. (2) In order to start the production of an excitatory state, the current must first exceed a certain value determined by the physiological polarization of the tissue at the moment of excitation—a polarization which seems to be a function of the particular metabolism's intensity. This second hypothesis enables one to take account of the modifications which the parameters of excitation undergo when the polarization varies either because of electrotonus or subordination. A bibliography of 297 titles is given.—*M. H. Piéron* (Sorbonne).

1687. Necheles, H., & Meyer, J. *On the inhibition of gastric secretion by oil of peppermint.* *Amer. J. Physiol.*, 1935, 110, 686-691.—It is concluded that oil of peppermint depresses gastric acid secretion and that the mechanism is probably a local one.—*T. W. Forbes* (N. Y. Psychiatric Institute).

1688. Nekrassov, P. A., & Khranilova, N. V. [The influence of physical work on the unconditioned salivary reflex in man.] *Arkh. biol. Nauk.*, 1934, 34, 593.—The unconditioned salivary reflex investigated by the method of Krasnogorski-Yushchenko showed its stability during the day and even during some months. Physical work, fatiguing the subject, decreases the quantity of saliva drops. The latter quantity correlates with the degree of fatigue. The quantity of saliva decreases after work.—*A. Yarmolenko* (Leningrad).

1689. Pavlov, J. P. *Vorlesungen über die Arbeit der Grosshirnhemisphären.* (Lectures on the work of the cerebral hemispheres.) London: Kniga (England, Ltd.) Bush House, 1933. Pp. 480. 12/6.—(Not seen).

1690. Popov, N. K. [The state of vegetative functions in cases of separation of central and peripheral nervous elements.] *Fiziol. J. USSR*, 1934, 17, 621-633.—In the nervous regulation of vegetative functions not only the central but also the peripheral nervous elements take part. The latter are the apparatus of local regulation, having the ability to adjust to the needs of the vegetative functions. The central nervous formations influence only the functions of the local apparatus. The pathological dis-

plays in the vegetative functions of organisms can be explained as a disorder of the interrelations of central and peripheral formations, which provokes disorders of metabolism and of the basal functions of tissues. Trauma of the nervous tissue changes the basal functions of tissues, which explains the symptom complex of shocks, coma, etc.—*A. Yarmolenko* (Leningrad).

1691. Raeva, N. V., & Rappoport, E. J. [The sensory pathways in motor activity.] *Fiziol. J. USSR*, 1934, 17, 636-652.—Already formed conditioned motor reflexes can be performed with lesions of the posterior funiculi, and likewise for the formation of the conditioned motor reflex. The conditioned motor reflex is also conserved in the temporary cold-block (Yushchenko) method, which denies the explanation of the preservation of the conditioned motor reflex in the synapses of the posterior funiculi.—*A. Yarmolenko* (Leningrad).

1692. Reilly, W. A. *Some endocrine observations in advanced ossification in children.* *Endocrinology*, 1934, 18, 117-122.—A study of 22 females 8 to 14 years of age showing precocious physical and gonadal maturity. The intelligence quotients ranged from 53 to 123 for this group and averaged somewhat below normal.—*D. J. Ingle* (Mayo Foundation).

1693. Ricci, A. *Possibilità di movimenti contemporanei con ritmo differente.* (Concerning the possibility of simultaneous movements of different rhythms.) *Cervello*, 1933, 12, 373-376.—The subjects were instructed to tap two different rhythms with both hands simultaneously. Unpracticed subjects were unable to do this, but departed with both hands from the prescribed rhythm, although they tapped different rhythms. Telegraph operators and some piano players did likewise. Some piano players were able to follow the rhythm for one hand but the other hand moved in a spontaneous tempo.—*R. Calabresi* (Rome).

1694. Richards, T. W., & Irwin, O. C. *The pressure factor in eliciting plantar responses.* *Psychol. Bull.*, 1934, 31, 746-747.—Abstract.—*J. F. Dashiell* (North Carolina).

1695. Rosenfeld, M. *Der galvanischen Nystagmus. Ein Beitrag zu seiner Physiologie und Pathologie.* (Galvanic nystagmus. A contribution on its physiology and pathology.) *Mschr. Psychiat. Neurol.*, 1930, 74, 257-272.—(*Biol. Abstr.* VIII: 20011).

1696. Rowles, E., & Patrick, J. R. *The effect of various stimuli on the basal metabolic rate, the blood pressure and the galvanic reflex in man.* *J. exp. Psychol.*, 1924, 17, 847-861.—The author made synchronized measurements of three physiological processes, metabolic rate, blood pressure and galvanic skin response, in male subjects under the influence of ideational and sensory stimuli. Data on the galvanic response had to be rechecked and are not included in the present report. Other findings are: (1) Attachment and operation of the apparatus caused very little rise in metabolism rate over the basal rate. (2) In the great majority of subjects sensory and ideational stimuli were followed by a definite rise in metabolic

rate. (3) The technique failed to show differential effects between sensory and ideational stimuli on metabolic rate; although the blood pressure curves show some differential effect in favor of ideational stimuli. (4) Irregular waves of greater amplitude and longer duration than the respiratory waves were obtained in the blood-pressure curves during the stimulation. Some of these waves followed specific stimuli of both an ideational and a sensory nature. (5) Measures of absolute blood pressure before and after stimulation showed a rise in both systolic and diastolic pressure in some subjects, but in others little change occurred; likewise the pulse pressure showed a rise in some but not in others.—*H. W. Karn* (Clark).

1697. Rountree, L. G., Clark, J. H., & Hanson, A. M. The biologic effects of thymus extract (Hanson). *J. Amer. med. Ass.*, 1934, 103, 1425-1430.—Thymus extract has striking biologic effects which are most evident in the offspring (rats) following continuous treatment by intraperitoneal injection of successive generations. In addition to the somatic changes there was a striking psychic precocity in the thymus-treated strain. The fifth-generation animals moved about in the cage at three days in as capable a manner as control rats of sixteen to twenty days of age. Swimming and weaning were possible at these ages.—*D. J. Ingle* (Mayo Foundation).

1698. Rubinstein, R. H. The production of testicular descent with the water-soluble (anterior pituitary-like) fraction of pregnancy urine. *Endocrinology*, 1934, 18, 475-481.—A boy of 10 was afflicted with dystrophia adiposo-genitalis. Both testicles were intra-abdominal, but descended when the patient was treated with an anterior pituitary-like fraction of pregnancy urine. Behavioral changes were toward the masculine and improvement in mental status was claimed. The IQ as determined by Binet-Simon tests was raised from 81 to 98.—*D. J. Ingle* (Mayo Foundation).

1699. Rynearson, E. H., & Moersch, E. P. Neurologic manifestations of hyperinsulinism and other hypoglycemic states. *J. Amer. med. Ass.*, 1934, 103, 1196-1199.—All cases of spontaneous hypoglycemia present neurologic symptoms of one form or another. They include weakness, fatigue, stupor, coma, tics, memory loss, speech disturbances, nervousness, excessive hunger, mental confusion, mania, and a number of ocular symptoms. These patients are sometimes diagnosed as having acute alcoholism. Symptoms are relieved by carbohydrate administration. The neurologist and psychiatrist are likely to have these patients referred to them and must keep in mind that a wide variety of neurologic symptoms can be caused by hypoglycemia.—*D. J. Ingle* (Mayo Foundation).

1700. Senise, T. *Essenza e valore del riflesso mesorotuleo.* (The nature and value of the mesorotular reflex.) *Cervello*, 1934, No. 3, 139-157.—*R. Calabresi* (Rome).

1701. Shilling, C. W., Hansen, A., & Hawkins, J. A. The effect of increased air pressure on vital capacity, expiratory force and breath-holding ability.

*Amer. J. Physiol.*, 1935, 110, 616-619.—25 experienced divers were studied at the Experimental Diving Unit of the Washington, D.C., Navy Yard. Expiratory force, vital capacity and the length of time during which the breath could be held were studied under six atmospheres of pressure. In general, all three showed an increase under high pressure as compared to the subjects' performance under atmospheric pressure.—*T. W. Forbes* (N. Y. Psychiatric Institute).

1702. Skawran, P. *Über die Arbeitsmöglichkeiten mit verschiedenen Konstruktionstypen ein und desselben Instruments.* (Concerning the possibilities for work with differently constructed types of the same apparatus.) *Arch. ges. Psychol.*, 1934, 92, 364-369.—Investigation has been attempted by the author of the differences in results in measuring motor fatigue when different types of the ergograph are used. He used the Mosso finger ergograph and the Rhine Institute hand ergograph. The variability was great and gives a basis for the argument that comparisons cannot be made by psychologists using different forms of psychological apparatus such as dynamometers, sphygmographs, tambours. He points out the desirability of having these standardized.—*A. B. Herrig* (Michigan Central State Teachers College).

1703. Skinner, B. F. The effect of degree of hunger upon the extinction of a conditioned reflex. *Psychol. Bull.*, 1934, 31, 731-732.—Abstract.—*J. F. Dashiell* (North Carolina).

1704. Stone, C. T. *The dangerous age in men; a treatise on the prostate gland.* New York: Macmillan, 1934. Pp. 105. \$1.75.—*R. R. Willoughby* (Clark).

1705. Symonds, P. M. Human drives. *J. educ. Psychol.*, 1934, 25, 681-694.—The paper is concerned with a restatement of the problem of drives. After a survey of the literature the author proceeds to a new formulation. There are three types or levels of drives in the human being. The first includes fundamental characteristics of adjustment, particularly drives toward success, toward the familiar, and toward new experiences. The second comprises Tolman's list of appetites and aversions. The third includes the following derived drives: desires to be with other persons, for attention from other persons, for praise and approval, to be a cause, for mastery, to maintain the self, for security and protection, for affection, tenderness, intimacy, and sense of belonging, and curiosity, including reaching, grasping, manipulation and exploration.—*J. A. McGeoch* (Missouri).

1706. Vassiliev, L. L. [Concerning the influence of mental work on the mitogenetic blood effect.] *Arkh. biol. Nauk*, 1934, 35, p. 95.—The performing of mental work without any motor activity did not give such clear decrease of mitogenetic blood effect as was observed in muscularly working subjects. The author proposes the following hypothesis: Muscular work sends into the blood a substance which can inhibit the process of the ultraviolet blood rays. Mental work does not provoke the formation of such

substance or substances.—A. Yarmolenko (Leningrad).

1707. Ward, L. B. Latency of response as a measure of retention and degree of learning. *Psychol. Bull.*, 1934, 31, 719.—Abstract.—J. F. Dashiell (North Carolina).

1708. Wendt, G. R. An interpretation of inhibition of conditioned reflexes as competition between reaction systems. *Psychol. Bull.*, 1934, 31, 730-731.—Abstract.—J. F. Dashiell (North Carolina).

1709. Wu, C.-F. Personal tempo and speed in some rate tests. *J. Testing* (Chinese), 1934, 2, No. 1, 85-94.—This paper is a Chinese résumé of an English report of the author's experimental studies of the personal tempo and speed in some rate tests. For the personal tempo, both an intensive study of 9 unselected persons for a period of 10 weeks and an extensive study of 26 unselected subjects for a single sitting were made. In both cases the same 6 tests were used; they were foot tapping, counting numerals, finger tapping, poetry reading, observing octagon, and word writing. In sittings 2-9 and 3-7 of the intensive study, all  $\rho$  correlations of the 6 tempo tests are positive, with median values at .875 and .88 respectively. There is clear evidence that in each of the 6 specific simple tests studied, an individual works at his own characteristic rate or "personal tempo." In other words, an individual's relative standing in the group is fairly constant at all times. Again, we notice that (with the exception of the word-writing test) the  $\rho$  intercorrelations between every 2 of the 6 tests are all positive, with a coefficient as high as .88 between the finger-tapping and counting-numerals tests. The results point out the fairly consistent relationship of personal tempo in the different tests, except the word-writing test. Furthermore, personal tempos are more marked in some tests than in certain other tests. In the extensive study of a larger group of subjects, the  $\rho$  correlations are also all positive, and become more significant on account of smaller probable errors. In the study of speed tests, the same 26 persons who served in the extensive study of the tempo tests were used. 6 tests were chosen: finger tapping, number naming, foot tapping, packing blocks, word writing, and triangular tapping. The faster one of the records obtained from 2 sittings was used. The  $\rho$  intercorrelations between every 2 of the 6 speed tests are all positive, in spite of the masking effect of very large probable errors. This cannot be purely a matter of chance. Thus, although no theoretical "g" factor could be demonstrated, there might be considered to be a "general phenomenon" in different tasks, in the sense that there is always some element of community between any 2 of the 6 simple tasks studied. In other words, a person who is comparatively fast in one task might be reasonably expected to be also comparatively fast in others. Finally, it was found that the 2 finger-tapping and the 2 word-writing tests were both positively correlated, with coefficients as large as  $.51 \pm .10$  and  $.56 \pm .09$ , while the intercorrelation between all of the 6 tempo tests and all of the 6 speed tests was  $.19 \pm .13$ . Thus for certain tasks

which have more or less similar content, an individual's natural rate of work or "personal tempo" is somewhat related to his maximum speed.—C.-F. Wu (Nat. Res. Inst. Psychol., Shanghai).

1710. Young, P. T. The approach to satiation for different kinds of food. *Psychol. Bull.*, 1934, 31, 733.—Abstract.—J. F. Dashiell (North Carolina).

1711. Yushchenko, A. A., Rolle, S. D., & Pupko, L. K. [The conditioned reflex with a temporary disorder of conduction in the ascending part of the unconditioned reflex arc.] *Arkh. biol. Nauk*, 1934, 34, 559-568.—The conditioned motor defensive reflex can be obtained while temporarily excluding the ascending pain pathways of unconditioned excitation. The absence of the conditioned reflex in experiments by Laug-Olmsted can be explained by the crudity of the method used. The excluding of centers by using low temperature can act as an extinguishing inhibitor.—A. Yarmolenko (Leningrad).

1712. Zener, K. The significance, for the problem of learning, of conditioned response experiments with human adults. *Psychol. Bull.*, 1934, 31, 715.—Abstract.—J. F. Dashiell (North Carolina).

1713. Zernoff, V. Les réflexes conditionnels dans la formation des hémolysines. (Conditioned reflexes in the formation of hemolysins.) *C. R. Soc. Biol., Paris*, 1934, 113, 1329-1332.—The experiments were made on guinea pigs with subcutaneous injections, in some cases, of 10.5 cc. of sheep hematin, and in other cases of 0.5 cc. of sheep red corpuscles. In all cases the conditioned excitation was a scratching of the right ear for 1 min. The results confirm the possibility of the formation of antibodies by conditioned-reflex methods.—M. H. Piéron (Sorbonne).

[See also abstracts 1529, 1574, 1597, 1607, 1611, 1614, 1615, 1622, 1623, 1624, 1632, 1633, 1634, 1640, 1641, 1719, 1728, 1735, 1738, 1739, 1744, 1746, 1747, 1755, 1756, 1758, 1759, 1773, 1779, 1834, 1896, 1954, 1982, 2015, 2023.]

#### PLANT AND ANIMAL BEHAVIOR

1714. Andreyev, L. A. Extreme limits of pitch discrimination with higher tones. *J. comp. Psychol.*, 1934, 18, 315-332.—Conditioning the dog's salivary response to pure oscillator tones under rigidly controlled conditions, the author obtained the following results: The dogs differentiated between tones of 19,000 and 20,000 cycles and between tones of 29,000 and 30,000 cycles. Less perfect discrimination was obtained between tones in the same ranges which differed by 50 and by 25 cycles. Since the dogs were unable to discriminate between different intensities of a tone of 35,000 cycles, the author concludes that the differentiation of tones depends upon pitch and not intensity discrimination. He also concludes, on the basis of these data, that the inability of the dog to respond to tones above 35,000 is not due to the fact that high tones are normally of low intensity. Bibliography.—N. L. Munn (Pittsburgh).

1715. Ball, J. Sex behavior of the rat after removal of the uterus and vagina. *J. comp. Psychol.*,

1934, 18, 419-422.—Rats deprived of the sex tract, exclusive of ovaries and Fallopian tubes, manifested normal sexual behavior. This shows that changes in the sex tract are not the basis of heat behavior, although they "may play some part in the psycho-biological mating reaction of the intact animal."—*N. L. Munn* (Pittsburgh).

1716. Bayroff, A. G. Pneumatic ejection from wrong entries in light discrimination by white rats. *Psychol. Bull.*, 1934, 31, 745.—Abstract.—*J. F. Dashiell* (North Carolina).

1717. Beritov, I. I., Fseretili, M., & Akhmeteli, M. [Investigations on individual behavior in dogs. Investigations on puppies' adaptation to alterations in the usual situation.] *Fiziol. J. USSR*, 1934, 17, 455-463.—The quick adjustment of puppies to new conditions (to new ways of going through fenced passes) after one testing cannot be formed in a reflex way and through establishing temporary connections. We can conclude that there are formed notions (ideas) of the environment and the place of food. This notion defines the tendency of movement.—*A. Yarmolenko* (Leningrad).

1718. Binet, L. *Nouvelles scènes de la vie animale*. (New scenes of animal life.) Paris: Gallimard, 1934. Pp. 172. 12 fr.—A collection of 20 short studies of animal life, each with a brief bibliography.—*M. H. Piéron* (Sorbonne).

1719. Bourguignon, G., & Bennati, D. Chronaxie vestibulaire bi-auriculaire et mono-auriculaire chez le chat et le lapin. (Binaural and monaural vestibular chronaxy in the cat and rabbit.) *C. R. Soc. Biol., Paris*, 1934, 117, 1292-1294.—A comparison is made of vestibular chronaxy in intact animals and in man. In the cat and the rabbit, as in man, binaural stimulation produces an inclination of the head toward the side of the positive pole. The chronaxy in the cat is exactly the same as in man; in the rabbit, it is larger. With monaural excitation the cat behaves as does man, but the rabbit responds differently. With the rabbit, the chronaxy is the same with respect to the inclination of the head, but not for the same pole at each ear. In order to explain this difference, the authors assume that, given the connections which connect the vestibular system and the movements of the eyes, the difference in behavior may be the result of binocular vision in man and the cat as opposed to only monocular vision in the rabbit.—*M. H. Piéron* (Sorbonne).

1720. Bousfield, W. A. The use of an empirical equation for describing changes in the eating behavior of animals. *Psychol. Bull.*, 1934, 31, 733.—Abstract.—*J. F. Dashiell* (North Carolina).

1721. Buel, J., & Ballachey, E. L. Limiting factors in the effect of the reward upon the distribution of errors in mazes. *Psychol. Rev.*, 1935, 42, 28-42.—Considerable emphasis has been placed by psychologists on the effect of the spatial position of the reward upon the orientation behavior of animals in mazes. Experiments of Lashley, Dashiell, and others have been so interpreted. The goal gradient hypothesis

requires this explanation. But recent studies, including their own, have convinced the present authors that these results can be interpreted as the effects of more specific factors, associated only indirectly with the reward, while the general factors of food orientation, etc., contribute little to the animals' behavior. They find that food position is effective only when it is associated with some specific situation which occurs elsewhere in the maze; i.e., some other unit similar to the last maze unit. They point out that the relative difficulty of blinds cannot be due to their relation to the reward, since it has been shown to be due to systematic factors present in the very first trial. Dashiell recognized that the forward-going tendency is not the same sort of determining factor as direction orientation, but failed to see that direction orientation can itself be explained in terms of the forward-going tendency. Centrifugal swing is another factor which is responsible for either correct or incorrect choices, depending on the conditions. Buel has found 94 factors which may account for errors, many of which are present on the first trial. The authors suggest that these specific factors should be investigated, instead of attributing orientation behavior to a single goal-seeking factor.—*A. G. Bills* (Chicago).

1722. Burkholder, P. R. Movement in the Cyanophyceae. *Quart. Rev. Biol.*, 1934, 9, 438-459.—Three types of movement (linear translation, axial rotation, and oscillation) occur in the blue-green algae, and have been ascribed by different authors to growth, osmotic currents, excretion of gelatinous materials, surface-tension changes, and peristaltic contractions of the cells. The rate of linear progression seems to be related to the osmotic pressure of the cells and the diameter of the filament. Light intensity and wave length are important in determining the movement of the filaments. The review covers the history and present status of the problem, but as yet no satisfactory explanation of the mechanism of these movements is available.—*O. W. Richards* (Yale).

1723. Chow, W. C. Preliminary notes on the large cells in the medulla oblongata of some lizards under various conditions. (In English.) *Trans. 19th Mtg Sci. Soc. China*, 1934, 66-67.—Abstract.—*C.-F. Wu* (Nat. Res. Inst. Psychol., Shanghai).

1724. Cornetz, V. *L'homme et la fourmi*. (Man and the ant.) Paris: Grund, 1933. Pp. 84. 8 fr.—The author presents a commentary on the book by P. Jacquard which dealt with distance orientation and the sense of direction in man. The author insists especially on the difference between human and ant orientation.—*M. H. Piéron* (Sorbonne).

1725. Coronios, J. D. Behavior inventory of the fetal guinea pig. *Psychol. Bull.*, 1934, 31, 753.—Abstract.—*J. F. Dashiell* (North Carolina).

1726. Couteaux, R. Sur l'unité fonctionnelle des Lombriciens. (On the functional unity of the Lumbricidae.) *Bull. Soc. zool. Fr.*, 1934, 59, 296-315.—As a result of observations on crawling and on mechanically and electrically elicited reflexes, the author states that he cannot assume a nervous activity

specific to the metameres. Metamerization of the nervous system does not produce a parallel series of functions and is not translated into a relative autonomy of the metameres.—*M. H. Piéron* (Sorbonne).

1727. *Crawford, M. P.* Brightness discrimination in the rhesus monkey and man. *Psychol. Bull.*, 1934, 31, 742.—Abstract.—*J. F. Dashiell* (North Carolina).

1728. *Culler, E., & Mettler, F. A.* Conditioned behavior in a decorticate dog. *J. comp. Psychol.*, 1934, 18, 291-303.—Normal dogs passed through two stages in becoming conditioned to auditory and visual stimuli. They very soon made a diffuse type of response upon and subsequent to the presentation of the stimulus, and later they responded specifically by lifting the foot as soon as the stimulus was presented, thus avoiding the shock. A decorticate dog (examination disclosed but a few shreds of cortical tissue) established the diffuse response as readily as normal animals, but failed to establish the specific avoidance reaction. The authors conclude that "the cortex is not at all needed for 'conditioning' as such in its most primitive and diffuse forms; but is definitely needed for an adaptive, problem-solving response (the latter is in any event grossly delayed by absence of cortex)." If the dog had been deprived of only half of its cortex, one might, according to the authors, have assumed that the intact half was functioning vicariously in what conditioning was obtained. Actually the conditioning was being mediated by sub-cortical levels. Thus the doctrine of vicarious functioning in cases of partial cortical ablation "needs careful scrutiny and restriction because it ignores conditioning at sub-cortical levels." Bibliography.—*N. L. Munn* (Pittsburgh).

1729. *Dennis, W.* Goal gradient or entrance gradient? *Psychol. Rev.*, 1935, 42, 117-121.—Heretofore, the distance of a given maze alley from the goal has been considered its most important attribute. This is brought out in Hull's goal-gradient hypothesis, among others. But the author points to data in experiments of Warden, Cummings, Montpellier, and his own, which indicate that distance from entrance is more important than nearness to goal. For example, the great decrease in difficulty of the second, third, etc., right-left pairs of alleys as compared with the first, in a ten-alley maze. If nearness to goal were the cause, then a short six-alley maze should give quite different results, yet the results are practically the same. Warden got comparable effects even in a two-alley maze. Several explanations of the effect of nearness to entrance are given. One is the distracting and emotionally disruptive effect of being so recently handled; another is the transfer of learning effect which develops in the successive alleys.—*A. G. Bills* (Chicago).

1730. *Eltringham, H.* On the tarsal sense-organs of Lepidoptera. *Trans. R. ent. Soc. Lond.*, 1933, 81, 33-36.—(Biol. Abstr. VIII: 20000).

1731. *Fearing, F.* The relation between body temperature and general level of activity in adult pigeons. *Psychol. Bull.*, 1934, 31, 753-754.—Abstract.—*J. F. Dashiell* (North Carolina).

1732. *Graham, C. H.* The visibility function of the white rat as determined by the electrical retinal response to lights of different wave lengths. *Psychol. Bull.*, 1934, 31, 737-738.—Abstract.—*J. F. Dashiell* (North Carolina).

1733. *Hall, C. S.* Emotional behavior in the rat. I. Defecation and urination as measures of individual differences in emotionality. *J. comp. Psychol.*, 1934, 18, 385-403.—This paper concerns the validity of assuming that defecation and urination in rats are indicative of emotional differences. These two measures were "validated against the number of days during which the rat ate food in the field. It was assumed that the rat's failure to eat was a sign of emotionality, since food was readily obtainable and under normal living conditions the rats did eat within the time set for the experimental period." When all other factors were controlled, the correlation between number of days not eating and number of days defecating was found to be .82. For urinating and not eating the correlation was .70. It is assumed that the strangeness of the field situation serves as the emotional stimulus. The question of the generality of this emotionality is raised, but not answered. The author says that "the availability of measures of intensity of emotionality should facilitate investigations in the domain of emotional behavior."—*N. L. Munn* (Pittsburgh).

1734. *Harlow, H. F., & Settlage, P. H.* Comparative behavior of primates. VII. Capacity of monkeys to solve patterned string tests. *J. comp. Psychol.*, 1934, 18, 423-435.—31 monkeys, of several species, were required to pull in one of a group of strings arranged before them in various patterns, the correct string being baited with a piece of apple. The authors found that both simple and complicated patterns could be solved by Old and New World monkeys. Marked individual differences appeared. Comparison of the present data with previous work shows that monkeys are far superior on such problems to infra-primate mammals. They solved the problems with about the facility of three-year-old children. Anthropoid apes do not appear to be superior to monkeys in such tests. "There is no demonstrable correlation within the primate order (excluding man) of the level of cortical development with the capacity to solve these tests." Bibliography.—*N. L. Munn* (Pittsburgh).

1735. *Haslerud, G. M.* Experiments in blocking segments of free and prescribed maze patterns of the rat. *Psychol. Bull.*, 1934, 31, 720-721.—Abstract.—*J. F. Dashiell* (North Carolina).

1736. *Honzik, C. H.* Studies in the sensory basis of the maze habit: II. The effect of interchanging parts of the maze. *Psychol. Bull.*, 1934, 31, 723.—Abstract.—*J. F. Dashiell* (North Carolina).

1737. *Horton, G. P.* The effect of intense and prolonged acoustical stimulation on the auditory sensitivity of guinea pigs. *J. comp. Psychol.*, 1934, 18, 405-417.—After reviewing previous literature on the problem, the author presents the results of an investigation in which guinea pigs were given auditory tests

before and after prolonged exposure to a tone of 1,000 cycles having a loudness of 125 decibels above the normal human threshold for this frequency. In the initial tests the respiration of the animal was conditioned so that a regular change in breathing was manifested upon presentation of each of the eight octave-tones within the range of 64 to 8192 cycles. The intensity of each tone was then lowered in steps of five decibels to a point below audibility. Following this, the intensity was raised in a similar manner. The animals were then subjected to continuous stimulation for a period of 110 hours. Subsequent tests comparable with those used at the beginning of the experiment showed that there had been a loss of sensitivity to the eight octave-tones. This loss was not confined to one tone more than to another. There was no recovery from the loss within a period of 298 days. "The general rather than specific loss of sensitivity would support a telephone type of auditory theory against a specific resonance or place type of theory." Extensive bibliography.—*N. L. Munn* (Pittsburgh).

1738. *James, W. T. A conditioned avoiding posture of the dog.* *Psychol. Bull.*, 1934, 31, 730.—Abstract.—*J. F. Dashiell* (North Carolina).

1739. *Jasper, H., & Bonvallet, M. La subordination chez le rat spinal.* (Subordination in the spinal rat.) *C. R. Soc. Biol., Paris*, 1933, 112, 1186-1188.—After thoracic section of the cord, the relation of the chronaxies of the antagonists decreases without reaching unity. There is recuperation and the subordination is reestablished in the rat by the action of the cord which has been isolated from the higher centers.—*M. H. Piéron* (Sorbonne).

1740. *Kahmann, H. Zur Kenntnis der Netzhaut der Reptilien. Eine vorläufige Darstellung.* (The retina of reptiles. Preliminary account.) *Zool. Anz.*, 1933, 102, 177-183.—(*Biol. Abstr.* VIII: 20004).

1741. *Kemp, E. H. The effect on the auditory limen of the guinea pig of prolonged exposure to an intense tone.* *Psychol. Bull.*, 1934, 31, 752.—Abstract.—*J. F. Dashiell* (North Carolina).

1742. *Lapicque, L., & Lapicque, M. Evidence chez les batraciens de la chronaxie de subordination.* (Evidence from the batrachians of the chronaxy of subordination.) *C. R. Soc. Biol., Paris*, 1934, 117, 744-747.—The following results were secured: (1) By chilling the posterior portion of the head of anurans subordination can be made to disappear, reappearing after warming the area. This shows a peripheral chronaxy conditioned by the temperature of the mesencephalon. (2) By compressing with a rubber band back of the jaws of a frog, peripheral subordination disappears. These results are the same as those secured by the ablation of the mesencephalon or by functional suppression through chilling, and so probably indicate a reflex inhibition of the same center. The chronaxy of a motor neuron may therefore be largely modified in a reversible fashion by an excitation applied to a point on the body having no direct relation with the leg involved and none with the

corresponding medullary center.—*M. H. Piéron* (Sorbonne).

1743. *Lapicque, M. Chronaxie de subordination chez la tortue.* (Chronaxy of subordination in the turtle.) *C. R. Soc. Biol., Paris*, 1934, 117, 583-586.—The turtle presents a favorable anatomical arrangement for the study of the modification of flexor and extensor nerve activities because the sciatic nerve can be separated into these two divisions. This is the reason the author repeated on the turtle the study which she had made on the frog. The turtle shows a decrease in chronaxy under the influence of the higher centers, a chronaxy of subordination. This function can be located in the turtle, as in the frog, in the thalamus.—*M. H. Piéron* (Sorbonne).

1744. *Liddell, H. S., James, W. T., & Anderson, O. D. The comparative physiology of the conditioned motor reflex: based on experiments with the pig, dog, sheep, goat, and rabbit.* *Comp. Psychol. Monogr.*, 1934, 11, No. 1. Pp. 89.—The method used in these investigations was essentially that of applying a shock to the animal's leg shortly after the presentation of an auditory or visual stimulus and recording such responses as respiration, leg retraction, head turning, and psychogalvanic reaction. Most of the phenomena reported by Pavlov for conditioning of the salivary response in dogs were observed. A notable exception was the phenomenon of external inhibition. Not all of the responses were conditioned at the same time, nor were they extinguished with equal readiness. For example: "The anticipatory movement of the foreleg which receives the electric shock is last to appear during conditioning and the first to disappear during the extinction of the conditioned reflex." Likewise, "The characteristic 'orienting' movement of the head . . . is first to appear and last to disappear." There were differences between the animals used. Thus the conditioned psychogalvanic response was more difficult to extinguish in the goat than in the sheep. This raises a question concerning the possibility of a different neural organization in the animals. The detailed results are reported in the form of tables and reproductions of records. There is also a diagram of the experimental situation. In a general discussion, cul-de-sac elimination and negative conditioning are regarded as dependent upon the same fundamental neural mechanisms. Bibliography.—*N. L. Munn* (Pittsburgh).

1745. *Magnan, A., Magnan, C., & De Villelongue, A. Contribution à l'étude de la vision des poissons.* (Contribution to the study of vision in fishes.) *C. R. Acad. Sci., Paris*, 1934, 199, 736-738.—From measurements of refraction made by them, the authors consider the eye of the fish to be an optical system composed of a spherical lens bathed in a medium having an index of 1.33 (the same as water). The authors have found that the various species of fish are slightly myopic. They seem adapted to see objects some meters away.—*M. H. Piéron* (Sorbonne).

1746. *Moldaver, J. Tonus nerveux central et réflexivité spinale chez les Anoures.* (Central nervous tonus and spinal reflectivity in the anurans.)

*C. R. Soc. Biol., Paris*, 1934, 117, 86-90.—Experiments were made to demonstrate the existence in the toad and spinal frog of a central latent tonus which was not revealed by a postural contraction in the skeletal and leg musculature and to show the dependence of this spinal tonus on the afferent impulses from the muscles and tendons. The results show that the anatomical or anesthetic sectioning of the sciatic at the level of the knee produces a more or less considerable weakening, reversible or irreversible depending upon conditions, of the excitability of the spinal reflex. This phenomenon appears to result from the suppression of those impulses which come continuously to the segmented spinal centers principally from the muscle and tendon receptors in the distal part of the leg. These impulses support by summation a latent central tonus which is the condition of the reactive capacity of the cord.—*M. H. Piéron* (Sorbonne).

1747. **Muenzinger, K. F.** The function of punishment as determined by its temporal relation to the act of choice in the visual discrimination habit. *Psychol. Bull.*, 1934, 31, 744-745.—Abstract.—*J. F. Dashiell* (North Carolina).

1748. **Munn, N. L.** Color blindness in white rats. *Psychol. Bull.*, 1934, 31, 743.—Abstract.—*J. F. Dashiell* (North Carolina).

1749. **Osterode, P.** Versuche zur Prüfung der Reizgesetze am intakten Frosch. (Researches for the testing of the stimulus laws on the intact frog.) Berlin TiH, Diss., 1933. Pp. 30.—*R. R. Willoughby* (Clark).

1750. **Ping, C.** On the effect of removal of the cerebral cortex of the guinea pig. (In English.) *Trans. 19th Mtg Sci. Soc. China*, 1934, 47.—Abstract.—*C.-F. Wu* (Nat. Res. Inst. Psychol., Shanghai).

1751. **Ping, C.** On the distribution of the largest motor cells in the spinal cord of the guinea pig in comparison with the albino mouse. (In English.) *Trans. 19th Mtg Sci. Soc. China*, 1934, 48.—Abstract.—*C.-F. Wu* (Nat. Res. Inst. Psychol., Shanghai).

1752. **Rabaud, E.** Les fourmis s'entr'aident-elles? (Do the ants aid each other?) *Bull. Soc. ent. Fr.*, 1934, 39, 153-155.—According to current opinion ants of the same colony render each other aid in diverse circumstances, and individuals in difficulty call for help. Several experiments described by the author furnish the formal proof that such opinions rest on incomplete observations, incompletely analyzed and distorted by preconceived ideas.—*M. H. Piéron* (Sorbonne).

1753. **Rey, A.** Recherches sur l'organisation sensori-motrice de la souris. (Investigations of the sensory-motor organization of the mouse.) *Arch. Psychol., Genève*, 1934, 24, 256-284.—An animal constitutes a good object for experimentation only to the extent that the properties of its organization are known. The author has attempted to make an inventory of the constants of sensory-motor assimilation in the white mouse, i.e. of the spontaneous behavior which the animal manifests in varied situations. Thus

if the mouse is enclosed in a small box and then liberated, one observes four forms of behavior (inspection, scratching, jumping, and gnawing), which may follow each other or alternate with inhibitory phases, a succession which may be studied by actographic methods. By varying the environment it is possible to make one response predominate and to show that an activity is supported to the extent that it succeeds. Gnawing is studied by means of a metal box which possesses an opening covered with paper. The mouse, placed inside, finally bites a hole in the paper and escapes to its nest. (If the rat does not succeed within an hour, a small hole is made in the paper as an aid to learning.) After learning, enucleation or the shaving of the vibrissae does not seem to modify the behavior. 44 mice which had learned the problem were operated on and lesions of various extents were made in the frontal cortex. The disorders of behavior were proportional to the extent of the lesions, varying from no effect on behavior to a total impossibility of making the response. The results are discussed in comparison with those of Lashley and the critique of Lashley by Hunter. To the simple criterion of "all or nothing," the author opposes the existence of a large variety of small variations and peculiarities of behavior. Irrespective of the extent of the lesion, gnawing persists. This behavior, therefore, is not of cortical origin, although certain accompaniments, like making a hole in the paper, require a minimal but not specifically localized cortical tissue. In 20 animals the author examines the extension of this behavior, using 3 boxes united by the windows the paper coverings of which the mouse must pierce in order to go from one box to the next and so finally regain its nest. Behavior here varies greatly, from rapid solution to complete disorientation. In the last chapter the author describes how mice free themselves when tied by the tail with a string. Pulling, inspection, tail chasing, jumping, gnawing, scratching the floor, and immobility appear in a blind and tentative way. The animal is overwhelmed by the stimulations and assimilates them in a disorganized way. Occasionally an animal attacks the string rapidly and reflexly; but usually the attack is intermittent.—*M. R. Lambercier* (Geneva).

1754. **Rochon-Duvigneaud, A.** Notes d'ophtalmologie comparée: 1. Les yeux des musaraignes. 2. Les yeux de la chouette chevêche. (Comparative ophthalmological notes. 1. The eyes of the shrew-mouse. 2. The eyes of the white owl.) *Bull. Soc. zool. Fr.*, 1934, 59, 218-226.—The shrew-mouse seems limited to the perception of light and moving objects. The lens is imperfectly transparent, and its irregular form does not permit well defined retinal images. The white owl has excellent diurnal vision. Light adaptation occurs slowly when the owl comes from a dark place; but once adapted, it sees excellently in full sunlight. A short bibliography.—*M. H. Piéron* (Sorbonne).

1755. **Ruch, F. L.** Generalized turning habit and anticipation as factors in the learning of linear mazes by the rat. *Psychol. Bull.*, 1934, 31, 721-722.—Abstract.—*J. F. Dashiell* (North Carolina).

1756. Schlosberg, H. A quantitative study of certain factors influencing the rate and depth of conditioning in the white rat. *Psychol. Bull.*, 1934, 31, 732.—Abstract.—J. F. Dashiell (North Carolina).

1757. Schneirla, T. C. The relationship between the two principal "instinctive" activities of army ants. *Psychol. Bull.*, 1934, 31, 745-746.—Abstract.—J. F. Dashiell (North Carolina).

1758. Sheehan, D. The effect of cortical stimulation on gastric movements in the monkey. *J. Physiol.*, 1934, 83, 177-185.—Cooling of the cerebral cortex decreased the activity of the stomach, while warming restored the pre-existing activity. Temperatures above 40° C. had no effect on gastric movements. In the "resting" (unfed) stomach no movements could be initiated by faradic stimulation of any point on the frontal, premotor, or post-central areas of the cortex. Faradic stimulation of both frontal and premotor areas caused inhibition of peristalsis in the "active" (fed) stomach. No evidence was found for the existence of sharply localized excitatory or inhibitory cortical centers.—M. A. Rubin (Clark).

1759. Sivadjian, J. Etude pharmacologique d'un réflexe conditionné. (Pharmacological study of a conditioned reflex.) *C. R. Acad. Sci., Paris*, 1934, 199, No. 18.—The author has re-performed some psycho-pharmacological experiments with conditioned reflex methods. The method of L. H. Warner was used to study the hallucinatory effects of mescal. An interval of about 1 hour 20 minutes after the injection was required for the appearance of the hallucinatory phenomena. Normally when the buzzer was sounded the animal changed compartments quickly, but without the sharp jumps which exist only after the electric shock, to which a squeal of pain is also given. However, 1 hour and 20 minutes after the injection of mescal, when the buzzer is sounded but no shock given, the animal jumps and squeals as though he had just been shocked.—M. H. Piéron (Sorbonne).

1760. Smith, K. U. The relative rate of establishment of a discrimination in the cat in "paired" and "unpaired" stimulus situations. *Psychol. Bull.*, 1934, 31, 744.—Abstract.—J. F. Dashiell (North Carolina).

1761. Spence, K. W. Visual acuity and its relation to brightness in chimpanzee and man. *J. comp. Psychol.*, 1934, 18, 333-361.—Visual acuity was determined by having the subjects differentiate (the adults by indicating verbally and the chimpanzee and children by opening a food box) between a striated and a plain field. The striated and non-striated fields were presented by means of Ives gratings, the gratings being at a sufficient distance so that the smallest width of lines was invisible to the animals. Acuity was determined by finding the width of lines which could be discriminated with an accuracy of 75%. It was determined for two distances of the test objects from the eye and for various intensities of illumination ranging from 0.00138 to 28.25 millilamberts. The visual acuity of the chimpanzee was found to be approximately equal to that of the human subjects. Acuity varied directly as the logarithm of the illumination of the test objects. In comparing his results

with those obtained for other animals, the author concludes that "chimpanzee vision is definitely superior to all except possibly that of the monkey (*Cebus*). Man, chimpanzee and monkey appear to have about the same order of visual acuity." Bibliography of 36 titles.—N. L. Munn (Pittsburgh).

1762. Thorndike, E. L. *The psychology of wants, interests and attitudes*. New York: Appleton-Century, 1935. Pp. x + 301.—A report of experiments on aspects of the learning problem conducted under the author's direction at Teachers' College. Wants, interests and attitudes are related by implication to such factors as relevance and belongingness, which are responsible for the confirming reaction at the basis of the law of effect. It is shown again that learning can take place when only tendencies are learned, that adjacent connections on both sides of the rewarded ones are strengthened, and that connections can be formed without awareness on the part of the subject either of the nature of the connection or of the fact that it is being formed. Part II is concerned with changes in wants. It is shown that they may change somewhat under the influence of various degrees of reward and punishment, and possibly also as a result of simple repetition, though it is difficult to separate this from some degree of reward. The influence of punishments, particularly as to their amount, is studied. There are chapters on the history of the use of rewards and punishments and on practical applications, appendices giving in extenso the material used, bibliography, and index.—R. R. Willoughby (Clark).

1763. Tolman, E. C. A case of learning in rats not explainable by conditioning. *Psychol. Bull.*, 1934, 31, 723.—Abstract.—J. F. Dashiell (North Carolina).

1764. Trueblood, C. K. Complex visual discrimination in the cat. *Psychol. Bull.*, 1934, 31, 742.—Abstract.—J. F. Dashiell (North Carolina).

1765. Tsang, Y.-C. The functions of the visual area of the cerebral cortex of the rat in the learning and retention of the maze. I. *Comp. Psychol. Monogr.*, 1934, 10, No. 4. Pp. 56.—In order to obtain data bearing upon the question of central versus peripheral control of the maze habit, groups of normal, peripherally blind, cortically blind, and peripherally and cortically blind rats were trained on open and inclosed mazes of the same pattern. The pattern was that of Lashley's maze III. Trials, errors, and time were the criteria. Normal rats, and possibly the cortically blinded, found the open maze easier than the enclosed. The reverse was true for totally blind rats, regardless of additional cortical blinding. Removal of eyes greatly affected learning of the open maze, but had no influence on learning of the enclosed maze. Cortical blinding was in general more detrimental than peripheral blinding. Analysis of all of the data leads the author to conclude that "The quality of maze performance of the cortically blinded is inferior to that of the peripherally blinded and the normals, suggesting dementia in the cortically operated. The visual projection areas normally participate in the integrative activity of the cerebrum as a whole; that is, in addition to their primary func-

tion of visual reception, they still have some sort of a general function." Extensive bibliography.—*N. L. Munn* (Pittsburgh).

1766. **Turner, W. D.** Non-tropicistic visual orientation in the young albino rat. *Psychol. Bull.*, 1934, 31, 743-744.—Abstract.—*J. F. Dashiell* (North Carolina).

1767. **Verrier, M. L.** Les yeux de deux colubridés: *Hypsirhina anhydris* Schneider et *Tropinodotus piscator* Schneider, et leurs rapports avec les yeux des autres reptiles. (The eyes of two colubrids, *Hypsirhina anhydris* Schneider and *Tropinodotus piscator* Schneider, and their comparison with the eyes of other reptiles.) *Bull. Soc. zool. Fr.*, 1934, 59, 363-366.—The author found two types of retinas with very dissimilar receptor elements in individuals which were biologically closely related and which possessed highly similar habitats and manifested very similar behavior. Both were aquatic, diurnal, and piscivorous.—*M. H. Piéron* (Sorbonne).

1768. **Viaud, G.** Sur les mouvements périodiques dans le phototropisme des Daphnies. Variations temporelles de l'intensité du champ lumineux. (Concerning the periodic movements in the phototropism of *Daphnia*. Temporal variations of the intensity of the luminous field.) *C. R. Soc. Biol., Paris*, 1934, 117, 775-777.—*Daphnia*, when placed in a nearly uniformly illuminated field, show a periodicity in their tropistic movements. The author has varied the intensities and has found that the speed of positive movement increases with an increase in light intensity in accordance with Weber's law. The speed of negative movements is unaffected by the increase in light intensity until a certain point when the negative reaction increases suddenly (flight reaction). On the hypothesis that the relative length of the positive durations measures the sensory adaptive capacity of individuals, it may be said that this capacity varies from one individual to another and that the average capacity varies inversely with the light intensity. There is reason in distinguishing, in the phototropism of *Daphnia*, between photokinetic action and the individual capacity of sensory adaptation. The displacement of a population is the resultant of these two phenomena.—*M. H. Piéron* (Sorbonne).

1769. **Viaud, G.** Sur les mouvements périodiques dans le phototropisme des Daphnies. Variations spatiales de l'intensité du champ lumineux. (Concerning the periodic movements in the phototropism of *Daphnia*. Spatial variations of the intensity of the luminous field.) *C. R. Soc. Biol., Paris*, 1934, 117, 778-780.—If one passes a diverging beam of light through an oblong tank of water, there results a lighted field whose intensity varies considerably from place to place. In such a field, individuals distribute themselves in the different intensities (some going directly to the highest intensity). Periodic movements of two types are found: back and forth movements in a zone of uniform intensity; and back and forth movements from a zone of average or low intensity to the zone of maximum intensity. It follows from these facts that each individual has a latent

phototropism which only becomes actual when the necessary physical and physiological conditions are present. At such a moment the animal goes toward the source of light with a speed which varies as the logarithm of the light intensity.—*M. H. Piéron* (Sorbonne).

1770. **Walls, G. L.** The visual cells of the white rat. *J. comp. Psychol.*, 1934, 18, 363-366.—The author has discovered cones in the retina of a white rat. He says, "not only are cone-type nuclei abundant in the rat retina, but their cells are easily seen, under good lenses, to be typical cones. Except for the absence of a differentiated ellipsoid or 'Fadenaparatus,' they are essentially similar to primate cones." The author points out that this demonstration of cones in the rat retina "is no proof of the color-perceptive function of these elements, but it does render untrue any assumption, such as Walton's, that this animal's rods perform in a dual capacity." A figure of the rod and cone nuclei in the albino Norway rat is presented.—*N. L. Munn* (Pittsburgh).

1771. **Wilson, M. O.** Symbolic behavior in the white rat. II. Relation of quality of interpolated activity to adequacy of the delayed response. *J. comp. Psychol.*, 1934, 18, 367-384.—In an apparatus requiring the rat, upon reaching the end of a long central alley, to turn in either the same direction or in a direction opposite to that of a turn made at the entrance to the alley, it was shown that the opposite, or heterolateral, turn was learned with greater difficulty than the homolateral turn. Interruption of activity during the period of delay (in the central alley), either forced by the experimenter or spontaneously assumed by the rat, decreased the accuracy of response after delay. This was true whether the interruptions were introduced during the process of mastery or after mastery of the delayed reaction. The forced interruptions were produced by confinement and by electric shock. "The best scores were made by those rats in whose behavior there were no hesitations or interruptions at any point in the maze. In other words, the 'smoother' runners were the best learners." Bibliography.—*N. L. Munn* (Pittsburgh).

1772. **Wolfe, J. B., & Spragg, S. D. S.** Some experimental tests of "reasoning" in white rats. *J. comp. Psychol.*, 1934, 18, 455-469.—Experiments similar to those of Maier on "reasoning" in rats were devised to test his assertion that rats solve problems in which combination of isolated behavior segments *per se* is required. In three such situations the rats failed to perform with better than chance accuracy. In a fourth situation, involving Maier's "three-table problem," the behavior of Maier's rats was duplicated. Analysis of these results, however, "showed that solutions were achieved in a manner entirely consistent with ordinary learning principles and that the invocation of 'reasoning' to account for such behavior was unjustified."—*N. L. Munn* (Pittsburgh).

1773. **Wolfle, D. L.** Maze behavior in the absence of all specific sensory cues. *Psychol. Bull.*, 1934, 31, 722-723.—Abstract.—*J. F. Dashiell* (North Carolina).

1774. Wu, K. S. Notes on the shape and size of the neurones in the cerebral cortex of the albino mouse. (In English.) *Trans. 19th Mtg Sci. Soc. China*, 1934, 50.—Abstract.—C.-F. Wu (Nat. Res. Inst. Psychol., Shanghai).

1775. Wu, K. S. Notes on the Golgi apparatus in the cerebral cortical cells of the albino mouse. (In English.) *Trans. 19th Mtg Sci. Soc. China*, 1934, 50-52.—Abstract.—C.-F. Wu (Nat. Res. Inst. Psychol., Shanghai).

[See also abstracts 1520, 1533, 1616, 1622, 1624, 1625, 1632, 1634, 1639, 1648, 1661, 1681, 1685, 1697, 2019.]

#### EVOLUTION AND HEREDITY

1776. [Anon.] Four generations in one almshouse at the same time. *Eugen. News*, 1934, 19, 108-109.—The article presents the picture and pedigree of four generations of a family in the almshouse at the same time. It is a border-line family in which illegitimacy runs high and one not quite able to care for itself in organized society. It is suggested that such an institution can often be managed in such a fashion as to promote the very social inadequacy it seeks to correct with charity. "Permanent custody in almshouse," or release "only after eugenic sterilization, seems demanded by sound policy on the part of the several states."—M. V. Louden (Pittsburgh).

1777. Fisher, R. A. The amount of information supplied by records of families as a function of the linkage in the population sampled. *Ann. Eugen., Camb.*, 1934, 6, 66-70.—This paper illustrates the evaluation of the amount of information supplied by a given body of data for different values of the true linkage value in the population, thus allowing one to test the efficiency of any proposed method of estimation within this range. The quantity of information respecting linkage values obtainable from records of families may be calculated from the theoretical frequencies of families of different kinds expressed in terms of the linkage value to be estimated. The quantity of information extracted by any proposed process of estimation may be equated to the reciprocal of its sampling variance. If they are equal the method of estimation is efficient.—J. W. Dunlap (Fordham).

1778. Fisher, R. A. The use of simultaneous estimation in the evaluation of linkage. *Ann. Eugen., Camb.*, 1934, 6, 71-76.—The purpose of this note is to show that the process of simultaneous estimation supplies a more powerful method than has yet been used for resolving the difficulties that arise when two types of double heterozygotes occur with unequal or uncertain frequency.—J. W. Dunlap (Fordham).

1779. Kanaev, I. I. [Concerning conditioned reflexes in uniovular twins.] *Arkh. biol. Nauk*, 1934, 34, 569.—Two girls, uniovular twins, were investigated by the saliva-reflex method of Krasnogorski. The forming of the reflex and the character of movements, the conditioned inhibition and the trace inhibition were the same in both twins. The indi-

vidual fluctuations of excitation are very much alike.—A. Yarmolenko (Leningrad).

1780. Seelig, O. *Zwillingsindividualität und Zwillingsgemeinschaft*. (Twin individuality and twin companionship.) Altona: Barkow, 1932. Pp. 76.—(Not seen).

1781. Somogyi, J. *Tehetség és eugenika. A tehetség biológiai, psychológiai és szociológiai vizsgálata*. (Talent and eugenics. Studies on biology, psychology and sociology of talent.) Budapest: 1934. Pp. 416.—Preface. Introduction. The problem of human equality, 1-10. First part: Biology of talent. A. Talent and heredity. I. Foundations of heredology, 11-36. 1. Historical survey. 2. Modern heredology. 3. Heredity and environment. II. Psychic heredity, 37-76. 1. Methods of investigation of psychic heredity. 2. Heredity of psychic degeneration. 3. Heredity of eminent faculties. 4. Heredity of mediocre faculties. 5. Origin of eminent talents. 6. Free will and heredity. B. Talent and somatic constitution. I. Talent and the nervous system, 83-97. 1. Brain and intelligence. 2. Phrenology. II. Talent and hormones, 98-111. 1. Internal secretion. 2. Effects of special hormones on mental activity. 3. Metapsychical foundation. III. Talent and constitution, 112-141. 1. Somatic constitutional types. 2. Psychic types. 3. Types of talents. IV. Talent and race. 1. Introduction. 2. Anthropological characteristics of the chief European races. 3. Methods of racial psychology. 4. Psychic structure of the chief European races. Part two: Psychology of talents. A. Psychological description of talent. I. Essence of talent, 175-188. 1. Ambiguity of talent. 2. Structural nature of psychic life. 3. Analysis of talents. 4. Sorts of talents and their connection. II. Intelligence, 189-199. 1. Essence of intelligence. 2. Types of intelligence. III. Emotional factors of intelligence, 200-205. 1. Consciousness of vocation. 2. Interest, ambition, will. B. Degrees of talent. I. Evolution of talent, 206-215. 1. Evolution and involution. 2. Low degrees of gift. II. Genius, 216-252. 1. Essence of genius. 2. Genius and insanity. 3. Genetics of genius. 4. Psychology of scientific discoveries. C. Diagnosis of talent. I. Diagnostic methods of talents, 253-271. 1. History. 2. Tests of faculties. 3. Systems of tests. 4. Estimation of faculties. II. Value of research on talents, 272-298. 1. Conditions of good tests. 2. Pros and cons of test research. 3. Practical value of research on faculties. Part three: Sociology of talent. A. Distribution of talent: I. Talent and social selection, 299-312. 1. Social ascendancy. 2. Talent and social classes. II. Problem of equality of peoples and races, 313-330. 1. People, race, talent. 2. The Nordic conception. B. Destiny of talent. I. Destiny of gifted individuals and families, 313-343. 1. Individualism and collectivism. 2. Decay of talent. II. Destiny of talented peoples and races, 344-355. 1. Decay of western Europe. 2. Theory of Malthus and decay of cultured peoples. C. Protection of talent: I. Eugenics as protection of talent, 356-383. 1. Evolution of eugenics. 2. Eugenics and social politics. 3. Eugenics

and racial theory. 4. Eugenics and crossing of races. II. School and protection of talent, 384-402. 1. Duration of study. 2. Schools for gifted children. 3. Selection. Epilogue, 403-405. Ethics of talent. Indexes. —P. Ranschburg (Budapest).

[See also abstract 1997.]

### SPECIAL MENTAL CONDITIONS

1782. Alexander, F. The influence of psychologic factors upon gastro-intestinal disturbances: a symposium. (1) General principles, objectives, and preliminary results. *Psychoanal. Quart.*, 1934, 3, 4, 501-539.—A study made at the Chicago Psychoanalytic Institute of psychic factors influencing gastro-intestinal disturbances was conducted on the principles that such psychic factors are specific in nature, that they are repressed tendencies rather than conscious psychological processes, and that the life situation serves only as a precipitating agent. Preliminary results warrant classification of patients into three types: (1) the gastric type, characterized by a wide range of minor subjective gastric symptoms, (2) the colitis type, characterized by the predominant symptom of diarrhoea, and (3) the constipation type. Fundamental emotional attitudes for the various types disclosed respectively the following elemental tendencies: (1) the wish to receive or take, (2) the wish to give or eliminate, and (3) the wish to retain. The author then discusses in some detail each of the various types, illustrating his discussion with case material, and elaborating in particular the oral aggressive tendencies shown and the compensations and over-compensations developed and the influence of these mechanisms upon the outward life situation of the patient.—M. H. Erickson (Eloise Hospital).

1783. Benedek, T. Some factors determining fixation at the "deutero-phallic phase." *Int. J. Psychoanal.*, 1934, 15, 440-458.—A case of extreme fixation at the narcissistic-phallic phase is discussed in detail and found to confirm Jones' hypothesis that it results in a homosexual perversion of the type marked by deep coloring derived from masculine identifications. The fixation appeared to depend on the particular phase of libidinal development reached at the time of the castration trauma, the intensity of this trauma, its effect upon further development of penile sexuality and super-ego development, the possibilities of the inhibitions producing a super-ego, with the mother as the nucleus which would restrict the capacity for heterosexuality and cause persistence of the narcissistic-phallic phase. A final point is that when this perversion develops, the subject's aggression is utilized within the ego and there occurs diversion of aggression, oral and anal impulses from original aims and they are sublimated into a continuous anti-cathexis to combat femininity by maintaining a narcissistic-phallic phase, i.e., by adopting pseudo-masculinity.—M. H. Erickson (Eloise Hospital).

1784. Brown, W. Sleep, hypnosis and mediumistic trance. *Character & Pers.*, 1935, 3, 112-126.—After pointing out the similarity between sleep, hypnosis

and mediumistic trance, the author gives the changes in galvanometric readings on Mrs. Eileen Garrett, British medium, while in deep hypnosis. The sitting lasted 62 minutes and during this time questions were asked concerning individuals and events known to the medium during childhood. The initial and minimum reading was 9000 ohms and the final and maximum reading was 41,000 ohms. Knee jerks and other tendon reflexes remained undiminished regardless of the depth of hypnosis.—M. O. Wilson (Oklahoma).

1785. Credaro, L. La psicanalisi di Sigismondo Freud e la scienza dell' educazione. (The psychoanalysis of Sigmund Freud and the science of education.) *R. C. Accad. Lincei*, 1933, 9, 199-219.—R. Calabresi (Rome).

1786. Eddison, H. W. The love object in mania. *Int. J. Psychoanal.*, 1934, 15, 459-461.—In manic-depressive psychosis, an attempt is made during the manic phase to effect a transference. Positive transference is more apparent than real, and usually discloses an underlying attempt at a negative transference. Two cases are cited briefly. In the first, a marked negative transference to the physician seemed to be the patient's only hold upon reality. In the second case, the patient tried to find someone whom he could hate and who would at the same time supply all his wants, a manifestation of an incapacity for transference in which the public became his mother, from which state arose his irresponsible social outlook.—M. H. Erickson (Eloise Hospital and Infirmary).

1787. Federn, P. Die Ichbesetzung bei den Fehlleistungen. I. (The ego-cathexis in slips. I.) *Imago, Lpz.*, 1933, 19, 312-338.—While mistakes and failures of association belonging to the psychopathology of every-day life are determined by dynamic processes, the ego does not always participate completely in the actions. There are cases, both in dreams and in waking moments, when the ego itself has no part in the slips. Sometimes there is conflict between a given set of the ego and conscious impulses. The part played by the ego is socially conditioned.—H. D. Spoerl (St. Johnsbury, Vt.)

1788. Hermann, L. Die Psychoanalyse als Methode. (Psychoanalysis as a method.) *Imago, Lpz.*, Beiheft 1, 1934. Pp. 113.—This is a comprehensive outline of psychoanalysis. It includes much of the historical development of the movement and an effort to systematize it as a science.—H. D. Spoerl (St. Johnsbury, Vt.)

1789. Horney, K. The overvaluation of love. *Psychoanal. Quart.*, 1934, 3, 605-638.—Analysis of a selected group of female patients disclosed a central problem of too much emphasis upon love. A common trait was a fear of not being normal, manifested in the sphere of eroticism, in relation to work, and in general inferiority feelings. Transference was dominated by three types of rivalry attitudes: (1) avoidance of dependence upon the analyst by attachment of feelings elsewhere, (2) evoking of the analyst's love and jealousy, (3) direct seeking of men as if in opposition to the analyst. This behavior arose from early

family rivalries and defeats. Hatred of the early rival is expressed in two ways, (1) placing the blame for erotic failure on other women, (2) doubts concerning attractiveness or anxiety about the sexual organs, with destructive tendencies toward men. The origin of overvaluation of male relationships lay in restoration of wounded self-esteem and defiance of victorious female rivals, and is enhanced by (1) a psychological configuration which forced them into sexuality, (2) the fear of being balked by external forces, and (3) the overvaluation of sexual gratification. The patients' method of escape by achievement fails, as does their love life.—*M. H. Erickson* (Eloise Hospital).

1790. **Jekels, L., & Bergler, E.** *Triebdualismus im Traum.* (Duality of instinct in the dream.) *Imago, Lpz.*, 1934, 20, 393-410.—There appear to be biological grounds for the age-old notion of a close relation between sleep and death. Recent physiological theories of sleep tend to confirm Freud's theory that sleep is neither a suspension nor a diminution, but an active process. In the dream may be found manifestations of the death instinct. Dreams may be classified under a bipolar schema, the poles of which are motivation by Eros and motivation by the death instinct. Corresponding to this scheme is the typical classification, ranging respectively from wishing dreams to aggression dreams. The death instinct operates through the ego-ideal, which it employs as an instrument. The authors' theory is supported by some of Freud's earliest interpretations of dreams.—*H. D. Spoerl* (St. Johnsbury, Vt.)

1791. **Kris, E.** *Zur Psychologie der Karikatur.* (On the psychology of caricature.) *Imago, Lpz.*, 1934, 20, 450-466.—As a form of humor the caricature is a kind of graphic wit having the properties of wit as distinguished by Freud. Caricature contains an element of magic, which may be understood by Piaget's formula of "magical thinking" in children. For the adult, the effect of the caricature in this sense is upon the one who views it rather than the one at whom it is aimed. It is by such devices that the tendencies demanding expression are liberated.—*H. D. Spoerl* (St. Johnsbury, Vt.)

1792. **Laforgue, R.** *Resistances at the conclusion of analytic treatment.* *Int. J. Psychoanal.*, 1934, 15, 419-434.—With the liberation of psychic energies formerly utilized in symptom expression fresh conflicts develop under the pressure of the libido freed, for which the patient must find an outlet. These new conflicts constitute a resistance to further analysis and result in a tendency for the patient to take flight, or to accept an intermediate form of recovery or illness, or to substitute an organic disease for the psychic. The author discusses the ways in which resistance manifests itself at the time when analysis is reaching success, its maneuvers to negate success, its purpose in denying the patient the fruits of successful analysis, and the obstacles preventing acceptance of recovery, illustrating his points by citing case fragments and dreams of patients near the end of their analysis. Often the resistance signifies a desire to baffle the physician as an expression of the

desire to baffle life itself, since loss of neurosis compels adjustment to the life situation without the protection offered by the illness.—*M. H. Erickson* (Eloise Hospital).

1793. **Laird, D. A.** *Bladder pressure and disturbed sleep.* *Med. Rec., N. Y.*, 1935, 141, 78-80.—A study of four months' continuous nightly observation with the aid of a somnokinetograph was made on the sleep of eight young men to determine the relationship between bladder pressure and disturbances of sleep. Records obtained indicate only that increased motility occurs on nights of high urinary output, but is manifested before the onset of increased bladder pressure as determined by volume content. Hence both increased motility and increased urine secretion appear to arise from a common but unknown cause. The evidence does not show that increased urine secretion disturbs sleep, but rather that poor sleep increases urinary production.—*M. H. Erickson* (Eloise Hospital).

1794. **Lasswell, H. D.** *Psychoanalyse und Soziolalyse.* (Psychoanalysis and socioanalysis.) *Imago, Lpz.*, 1933, 19, 377-383.—Psychoanalysis has contributed an intensive method which supplements the extensive methods at the disposal of socioanalysis. The interview is basic when utilized in the light of the cultural background and social conditions in a given case. Moreover, many of the processes discovered through psychoanalysis have their counterparts in social processes. Various sociological, political, industrial, etc., problems can be solved through the material assistance of psychoanalysis. A combination of the intensive and extensive methods yields a better knowledge of the totality that forms the subject matter of social science.—*H. D. Spoerl* (St. Johnsbury, Vt.)

1795. **Levey, H. B.** *The influence of psychologic factors upon gastro-intestinal disturbances: a symposium. (4) Oral trends and oral conflicts in a case of duodenal ulcer.* *Psychoanal. Quart.*, 1934, 3, 574-582.—The observations made during the first ten weeks of the psychoanalytic treatment of a 22-year-old man who suffered from difficulties with his studies, sexual inadequacy, and a duodenal ulcer are reported. The material produced by the patient was grouped around definite oral trends and conflicts, and his fantasies were built around breasts and the act of nursing. His surface attitude was one of over-ambition in compensation for his passive receptive tendencies. Several of his fantasies are discussed for their significance.—*M. H. Erickson* (Eloise Hospital).

1796. **Levine, M.** *The influence of psychologic factors upon gastro-intestinal disturbances: a symposium. (5) Pregenital trends in a case of chronic diarrhoea and vomiting.* *Psychoanal. Quart.*, 1934, 3, 583-588.—The findings are reported on a single case belonging to both the diarrhoea group and the gastric group, which showed both strong "giving" reactions and strong receptive urges. The patient's superficial behavior was that of marked open-handedness, but his fundamental tendency was a strong desire to receive, with his "giving" an unconscious repayment

for what he received or desired to receive. The analysis disclosed that his emphasis on oral and anal reactions resulted from castration fear with resort to pregenital forms of adjustment, and the desire to establish infantile dependencies in his life situation was a protection from his castration fears.—*M. H. Erickson* (Eloise Hospital).

1797. **Maliniak, S.** *Observations sur la mobilité dans le sommeil.* (Observations on mobility during sleep.) *Arch. Psychol., Genève*, 1934, 24, 177-226.—In order to determine the extent to which sleep is a stable individual characteristic, the author recorded her mobility during sleep for a period of several months. A rubber tube was placed under the mattress and was connected with a Marey tambour writing on a drum. The records were studied for two periods, during one of which the author took opium for therapeutic reasons. In determining a base for comparison, she made a statistical analysis either of hourly records or of some other fraction of the total duration of sleep. The most constant results were secured for hourly intervals of a total 6-hour sleep period. Detailed tables give the average frequency of movements, the average variations as well as the quotients of mobility showing the increase or decrease in hourly mobility. The average general frequency is 4.8 movements per hour without opium and 3.9 with opium. In both cases the most frequent duration of mobility was 5-6 minutes. The mobility curves in the two cases are the same: the first hour is always the least active; the sixth hour, the most active; and the intermediate ones vary between these limits. It is therefore demonstrated that mobility in sleep presents a typical character for a given subject. The author has been able to confirm the statement that early retiring favors calm sleep, that emotional shocks agitate sleep, that slight intellectual and physical fatigue disturbs sleep, while great fatigue calms it. The author also submitted to a total fast for 2 days and for 5 days. The first days of fasting calmed sleep, while the following days disturbed it greatly. This disturbance is attributed to the suffering caused by thirst. Bibliography of 33 titles.—*M. R. Lambercier* (Geneva).

1798. **Nunberg, H.** *The feeling of guilt.* *Psychanal. Quart.*, 1934, 3, 589-604.—There are two types of guilt, (1) the guilt expressed by fear of social or outer authority, and (2) the guilt expressed by fear of inner authority or conscience. Guilt expression has two aims, (1) a striving for love in an attempt to undo the crime, and (2) the desire to be punished and to suffer. The feeling of guilt originates in a hostile identification through incorporation or the act of appropriation, and may be undone by "giving back." It leads easily to anal regression, since, as in the infant, out of fear of loss of love, instinct gratification is renounced, paralleled in adults by gift making. Earliest guilt feelings may be observed in the pre-Oedipal phase, and often conceal ungratified object-libido with a consequent sense of loneliness, and lead to tendencies toward gratifying object-libidinal strivings. The mechanism of turning of aggression against the ego is explained by the super-ego development, in

which introjection prevents outward discharge of aggression. The earliest stage of self-punishment can be found in the pre-Oedipal phase. Guilt may be distinguished from punishment need, since it tends to restore love relationships, while the need for punishment repeats on the ego real or imaginary object destruction. With inhibition of libido aggression is liberated, and inhibition of this aggression gives rise to feelings of guilt eventuating in self-punishment.—*M. H. Erickson* (Eloise Hospital).

1799. **Pfister, O.** *Neutestamentliche Seelsorge und psychoanalytische Therapie.* (New testament mental healing and psychoanalytical therapy.) *Image, Lpz.*, 1934, 20, 425-443.—Religion in general embodies aims and interests that are opposite to those of psychoanalysis, as Freud has pointed out, though Freud's theory of father-substitution with respect to his theory of God may be disputed. On the other hand, there are a great many points of view and techniques that psychoanalysis and the Jesus of the four gospels possess in common. Jesus' theological conceptions have close analogies in the theory of psychoanalysis. Nevertheless, the dissimilarities are great. Jesus' religion involved items other than the resolution of conflicts, which is the purpose of psychoanalysis. The comparison is presented as a discussion of 8 theses.—*H. D. Spoerl* (St. Johnsbury, Vt.)

1800. **Ranschburg, P.** *Talentum és elme fogya-tékoosság.* (Talent and mental deficiency.) *Mag. psychol. Szle*, 1933, 6, No. 3-4.—The author denies the teaching of L. Szondi (see VII: 4789) according to which positive extreme variants like talent or genius are bionegative, like the negative variants, i.e., mentally deficient individuals. Although psychosis is to be found in many cases of genius, the brains of great geniuses show generally a greater weight and a quantitatively and qualitatively richer structure than those of normals. Their lifetime is, as the author shows from 226 geniuses of different sorts, much longer than that of average men (177 of them 61-98 years, 109 71-90 years old); and although the number of their offspring may be less than average, their mental accomplishments for the well-being and the future of race, nation, and mankind are incomparably greater. On the contrary, the lifetime is essentially shorter, the brain in each respect much poorer, the number of offspring (of mostly inferior value) higher, and in every relation the contribution to group, race, nation and mankind less than average with defectives. According to Szondi, the degree of bionegativity is always equal to that of psychonegativity. Thus the greater is the psychopositivity, the more extreme ought to be the psychonegativity. The only essential biological difference between extreme positive and extreme negative, according to Szondi, would be their different genesis. Feeble-mindedness derives, according to his statements, from external, talent and genius from internal sources; the former is generally exogenous, the latter endogenous. How is it possible, asks the author, to measure the biological value of two groups of such a different nature and such an opposite origin by the same scale?—*P. Ranschburg* (Budapest).

1801. Rhine, J. B. **Telepathy and clairvoyance in the normal and trance states of a medium.** *Character & Pers.*, 1935, 3, 91-111.—The medium was the well-known British sensitive Mrs. Eileen J. Garrett. The results may be summarized thus: (1) almost all scores are above chance, the critical ratios ranging as high as 31; (2) telepathy scores are markedly higher than clairvoyance scores for both normal and trance personalities; and (3) there are striking similarities in the normal and trance personalities in both telepathy and clairvoyance, indicating a common fundamental mental organization in both.—M. O. Wilson (Oklahoma).

1802. Sheehan-Dare, H. **On making contact with the child patient.** *Int. J. Psychoanal.*, 1934, 15, 435-439.—Psychoanalytic contact with the child is based on an understanding of his unconscious conflicts. Analysis is preceded by a pre-stage of social contact in which the role of the mother and her attitude toward analysis is important. Following preliminaries, the first direct contact may be very difficult. However, interpretation is more easily achieved in children, since they reject wrong interpretations, while adults will seize upon incorrect ideas as further defense mechanisms against the analysis. A case is cited of a 3½-year-old boy who did not talk or give any evidence of hearing or understanding words. Analysis disclosed in the patient a profound unconscious belief in the omnipotence of the destructive powers within himself and others. Interpretation of the unconscious fantasies of destruction was effectual in overcoming the fear, since it was realized that the person toward whom they were directed knew about them and yet was unafraid. This realization constituted a new experience for the child, which by constant testing he could use to convince himself that his fears were but fantasies.—M. H. Erickson (Eloise Hospital).

1803. [Various.] **Lélekelemzési tanulmányok.** (Studies on the chief problems of psychoanalysis.) Budapest: 1934.—Contents: I. S. Freud: S. Ferenczi, 5-9. II. General psychoanalytic psychology, 10-64. 1. G. Roheim: The primitive man. 2. Alice Bálint: Evolution of affection and sense of reality. 3. Unconsciousness and the rotation theory of instincts. 4. Lillian K. Rotter: Psychology of female genitality. III. Clinical manifestations of neuroses, 65-142. 1. Michael Bálint: Analysis of character and reconditioning. Ladislaus Révész: Organic diseases in the service of libidinal economy. 3. Jos. M. Eisler: Neuroses of advanced age. 4. Catherine F. Levy: Enuresis of children. 5. Claire Lázár: Educational guidance. IV. Clinical manifestations of psychoses, 143-203. 1. I. Hollós: Dreams and functioning of mental diseases. 2. Lilly G. Hajdu: Contributions to the analysis of schizophrenia. 3. Almássy: Psychoanalysis of amentia-like diseases. V. Technical problems, 204-248: 1. Sigmund Pfeifer: The reforms of S. Ferenczi in psychoanalytic technique. 2. Fanny K. Hahn: The role of transference and counter-transference in psychoanalysis. 3. Vilma Kovács: Developing and controlling analysis. VI. Border problems, 249-

311. 1. Géza Szilágyi: The Hell of the poet John Vajda. 2. Géza Dukes: The methods of criminal psychoanalysis. 3. Julius Szűcs: Psychic connections of diseases from the standpoint of the practical physician. 4. Louis Levy: Important points in the anamnesis of the heart disorders.—P. Ranschburg (Budapest).

1804. Wälder, R. **Das Freiheitsproblem in der Psychoanalyse und das Problem der Realitätsprüfung.** (The problem of freedom in psychoanalysis and the problem of reality testing.) *Imago, Lpz.*, 1934, 20, 467-484.—The psychological problem of freedom is that of freedom from various hindrances and of freedom for possibilities in life. The most general form of this freedom is the capacity for transcending oneself, using the word "transcend" in the literal sense. This form is implicit in Freud's conception of the super-ego. The other forms are intensive experience and apprehension of the true nature of an object. Three types of mental disturbance correspond negatively to these forms of freedom. It is by testing reality, within the schema of psychoanalytical theory, that freedom may be achieved and augmented. One aspect consists of "progressive" fixations. There are evident consequences for psychotherapy and education.—H. D. Spoerl (St. Johnsbury, Vt.)

1805. Wilson, G. W. **The influence of psychologic factors upon gastro-intestinal disturbances: a symposium.** (3) **Typical personality trends and conflicts in cases of spastic colitis.** *Psychoanal. Quart.*, 1934, 3, 558-573.—Three cases of patients suffering from spastic colitis are given in some detail to illustrate various personality trends and conflicts. Each case shows a fundamental emotional tendency to demand and expect from others—oral aggressive and receptive tendencies—and to make restitution for all things received at an anal level with a symptomatic diarrhoea. Analysis of the first patient showed that marked economic success had eventuated in a sense of guilt based on his need to return full value, resulting in a diarrhoea. Analysis of the second patient disclosed a life situation of dependency with conflicts of guilt centering around oral receptive tendencies, rejection of the female role as inferior, and guilt feelings because of castration tendencies toward the male, all of which were relieved by a symptomatic ejecting in contrast to her receptive desires. Analysis of the third case disclosed conflicts between passive dependent and aggressive competitive desires, with a symptomatic diarrhoea constituting a form of restitution for aggressive taking and castrative tendencies.—M. H. Erickson (Eloise Hospital).

1806. Winterstein, A. **Echtheit und Unechtheit im Seelenleben.** (The genuine and non-genuine in mental activity.) *Imago, Lpz.*, 1934, 20, 383-392.—A promising investigation in which some pioneer work has been done is that of "genuine" and "non-genuine" mental phenomena. "Genuine" mental activity occurs when the person is attuned completely to the situation. "Non-genuine" mental activity is exemplified in instances which some have called cases of depersonalization. Such phenomena are, as it were, out of character. Yet they are not impostures. In

feeling, a common example of the "non-genuine" may be the transference of affect; the cause of "non-genuine" feelings is bound up with the mechanism of identification. Opinions, beliefs, and values as well as feelings may be "non-genuine." Such phenomena may nevertheless be characteristic of the person. Psychoanalysis has long made use of the fact that what is here called the "non-genuine" is best combated by the ego-ideal.—*H. D. Spoerl* (St. Johnsbury, Vt.)

[See also abstracts 1524, 1542, 1625, 1629, 1638, 1639, 1661, 1759, 1856, 1897, 1899, 1927, 1942, 1944, 1957, 2019.]

#### NERVOUS AND MENTAL DISORDERS

1807. *Aitken, R. S., & Russell, D. S. A case of Simmonds' syndrome.* *Lancet*, 1934, 227, 802-806.—Simmonds' disease is a manifestation of pituitary anterior lobe deficiency in the human. Although the syndrome characteristically includes intellectual deterioration such changes were not marked in the case reported here.—*D. J. Ingle* (Mayo Foundation).

1808. *Alajouanine, T., Thurel, R., & Ombredane, A. Somato-agnosie et apraxie du membre supérieur gauche.* (Somatic agnosia and apraxia of the left arm.) *Rev. neurol.*, 1934, 41, 695-703.—The apraxia described in this patient is global. The left arm is not only incapable of executing the least expressive gesture, but it is also incapable of utilizing objects. The mechanism of this localized apraxia is indicated by the finding of a somatic agnosia in the same arm. The apraxia of the left hand involves disorders in the execution of movements requiring both hands, thus leading to the initial impression of an ideational apraxia. The patient perceives the pain stimuli applied to his left arm, but he cannot localize them.—*M. H. Piéron* (Sorbonne).

1809. [Anon.] *Moron marriage.* *Eugen. News*, 1934, 19, 109.—Training schools for high-grade feeble-minded strive to prepare their inmates for living in society at large as self-sustaining and self-controlled members, and many consider marriage of border-line defectives as an essential step in the rehabilitation. The article points out the liability of degeneracy in subsequent generations, and pronounces this bolstering up of feeble-minded individuals for marriage with the intent to have children "about the most uneugenic and uncharitable thing" a charitable institution could do.—*M. V. Louden* (Pittsburgh).

1810. *Aronson, A. J. [Concerning the question of the combination of schizophrenia with epilepsy.]* In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 189-199.—Many brain lesions can simulate symptomatically schizophrenia and epilepsy. The reactions of the defective brain in the pubertal period (*Minderwertigkeitsgefühl*) are a factor in building paranoid delusions. The simultaneous display of schizophrenia and epileptic processes is very rarely observed, but is theoretically possible. The spasmodic fits in schizophrenia are the result of the reaction of the organism to the process.—*A. Yarmolenko* (Leningrad).

1811. *Belado, L. Confusión mental.* (Mental confusion.) *Arch. argent. Psicol. norm. patol.*, 1933-1934, 1, 75-77.—The confusion syndromes may be clinically differentiated, according to their etiology, into the following classes: infectious or post-infectious; autotoxic; endocrine; traumatic; and emotional.—*R. M. Bellows* (Ohio State).

1812. *Bizzarri, A. I presupposti psicologici nelle dottrine delle afasie.* (The psychological presuppositions in the doctrines of aphasia.) *Arch. Patol. Clin. med.*, 1934, 13, 569-606.—The author examines the psychological conceptions which dominate the principal doctrines of aphasia. The observations of Abramowski and of Bergson suggest an interpretation of the aphasia of comprehension which seems to harmonize with clinical, anatomical, and psychological data.—*R. Calabresi* (Rome).

1813. *Boino-Rodziewich, G. G. [A contribution to the study of involutional psychoses.]* *Sovetsk. Psichonevrol.*, 1934, No. 4, 5-10.—The author found that there is no definite constitution and no simple etiological factor playing a part in the origin of involutional psychoses. But there exist many involutional dispositions and prepsychotic peculiarities which form the necessary conditions for the disease and manifest themselves under the influence of the involutional psychoses. Both forms of involutional psychoses, the vascular and the senile-atrophic, are phases of the same general regression which manifests itself also in separate organs.—*A. Yarmolenko* (Leningrad).

1814. *Bolsi, D. Patogenesi delle psicosi affettive.* (Pathogenesis of the affective psychoses.) *Med. internaz.*, 1934, No. 6, 257-261.—*R. Calabresi* (Rome).

1815. *Boschi, G. Vedute sulle allucinazioni de-sunte dalle allucinazioni cenestesiche e dalle paracenestesie.* (Observations on hallucinations selected from those of cenesthesia and paracenesthesia.) *G. Psichiat.*, 1933, 61, 218-221.—*R. Calabresi* (Rome).

1816. *Boschi, G., & Tanfani, G. Allucinazioni cenestesiche e paracenestesiche.* (Cenesthetic and paracenesthetic hallucinations.) *G. Psichiat.*, 1933, 61, 221-224.—*R. Calabresi* (Rome).

1817. *Brailovsky, V. V. [The involutional psychoses and the bodily constitution.]* *Sovetsk. Psichonevrol.*, 1934, No. 4, 11-22.—The study of a hundred patients suffering from involutional psychosis shows the predominance of the pyknic type. The group of women patients shows a higher percentage of the leptosome type than was found for the normal old women. Dividing the patients into three groups, the author has found that the arteriosclerotics give a predominance of the athletoid type, the presenile psychotics are predominantly of the athletoid or digestive type; the senile patients are of the respiratory type. Various dysplastic stigmata are but weakly evident. The course of diseases in persons of the leptosome type is less favorable than in those of the pyknic type.—*A. Yarmolenko* (Leningrad).

1818. *Cerra, R. Il tipo costituzionale nelle schizofrenie in rapporto al tipo costituzionale negli epilettici*

ed a quello di individui sani di mente. (Constitutional type in the schizophrenics in relation to constitutional type in epileptics and in normals.) *Ann. Osp. psichiat., Catanzaro*, 1933, 81-125.—*R. Calabresi* (Rome).

1819. *De Giacomo, U.* Una nuova forma di catatonie sperimentale nell'uomo: la catatonie sperimentale uretanica. (A new form of experimental catatonia in man: uretanic experimental catatonia.) *Schizofrenie*, 1934, 4, 67-70.—*R. Calabresi* (Rome).

1820. *De Sanctis, S.* L'instabilità. (Instability.) *Cervello*, 1934, No. 2, 90-113.—The author discusses the psychological, psychiatric, and neurological problems of the unstable and gives a survey of the remedial possibilities.—*R. Calabresi* (Rome).

1821. *Dretler, J.* Des relations entre la croyance de l'halluciné et sa conviction de l'universalité des hallucinations. (The relations between the hallucinated person's belief and his conviction of the universality of the hallucinations.) *Encéphale*, 1934, 29, 381-387.—These studies were made to supplement those of Ey, who had indicated that true hallucination is characterized by belief on the part of the hallucinated person and by his profound conviction that the people about him experience the same sensations that he does. After giving a detailed history of four typical cases chosen purposely from a very high mental level, the author states that belief and the conviction of universality occur together in the same patients. During the morbid development one sees the conditions appear upon which are based the evolution of the two phenomena. It is then understandable that one may have belief without conviction, but never conviction without belief.—*M. H. Piéron* (Sorbonne).

1822. *Dubinin, A. M.* [Concerning endocrine dementia.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 240-253.—Endocrine dementia has a middle place between the two dynamically polar types of dementia organica and schizophrenica. The endocrine dementia associates elements of both forms, which defines its specific place.—*A. Yarmolenko* (Leningrad).

1823. *Edelstein, A. O., & Skornyakova, S. S.* [The clinical manifestations of psychic disorders in pellagra.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 387-398.—*A. Yarmolenko* (Leningrad).

1824. *Enderle, C.* In tema di semeiotica mentale. (Concerning mental signs.) *Arch. gen. Neurol., Psichiat., Psicoanal.*, 1934, 15, 5-19.—*R. Calabresi* (Rome).

1825. *Florenskaya, J. A.* [On the method of logopedia.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. P. 376.—The logopedic analysis of aphasia shows the value not only of the form of aphasia but of the state of the general balance of psychic functions in the patient. The disorder of the psychic balance can give a decrease or even annihilation of the psychic work ability necessary for

the restorative, active speech orthopedia.—*A. Yarmolenko* (Leningrad).

1826. *Florenskaya, J. A.* [Concerning the functional speech-disorders—paraphasia and tachylalia.] *Sovetsk. Psichonevrol.*, 1934, No. 4, 100-109.—In the present article the author deals with the group of paraphasias, which modern logopedia regards as a disorder, and with accelerated pronunciation of words with transpositions or lapses of syllables and words and loss of distinction. The genetic analysis of this function has shown that rapid speaking is a secondary formation, not a typical feature. A main trait of paraphasia is the dysfunction of a more complex type of thought and speech and a particular attention disorder; there is lost the ability to transfer successively and voluntarily the attention throughout the whole word, and to regulate the attention. The author proposes to distinguish two groups of verbal pathology, giving to the primary disorders of speech the name of tachylalia.—*A. Yarmolenko* (Leningrad).

1827. *Friedmann, B. D.* [On the doctrine of depersonalization.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. P. 48.—Depersonalization is a mild psychotic state which discloses another pathological state. It is a psychosis displayed for the patient himself only in the internal perception of changed psychic functions in the form of alienation, estrangement. Each component of the depersonalization state must be investigated from the pathological point of view.—*A. Yarmolenko* (Leningrad).

1828. *Friedmann, B. D.* [On the relation of the circular psychosis to the organic brain diseases.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 262-274.—*A. Yarmolenko* (Leningrad).

1829. *Ganz, E., & Loosli-Usteri, M.* Le test de Rorschach appliqué à 43 garçons anormaux. (The Rorschach test applied to 43 abnormal boys.) *Arch. Psychol., Genève*, 1934, 24, 245-255.—This study was made in order to establish a ready-reckoner for retarded children. The subjects, 10-14 years of age, were pupils in special classes. For the most part they were feeble-minded. Some were imbeciles, but none were idiots. Retarded children project themselves more easily than do normal children. They give more total interpretations, but 37% of these interpretations indicate the perception of form to be slight. Small details are more numerous with the retarded, while the "oligophrenic details" that Rorschach believes characteristic of abnormals were found more numerous in the normals. The authors propose the term "inhibitory details" for the above. Precision of thought is less in the abnormals. With the retarded, associations are as numerous as with the normals; but the former subjects do not know how to select, a very vague resemblance with the interpreted task being sufficient. Furthermore, the succession of interpretations is very loose or confused. There is no difference between normals and abnormals in kinesthetic and color interpretations, a fact which appears to the authors to be additional proof that these interpretations are unrelated to intelligence. On the other hand, clear-obscure interpretations are

more frequent with the abnormals. This indicates a more than normal tendency to quick inexplicable changes in mood, in spite of a well-adapted affectivity. The contracted type of character is more frequent and the introverted type less frequent than with normals.—*M. R. Lambercier* (Geneva).

1830. *Geier, T. A., & Kholsakos, N. G. [Schizophrenia and essential hypertension.]* In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 107-113.—*A. Yarmolenko* (Leningrad).

1831. *Gelma, E., & Eissen, J. A propos de l'évolution vers la schizophrénie d'un cas de délire d'interprétation Sérieux-Capgras.* (Concerning the development toward schizophrenia of a case of the Sérieux-Capgras delusion of interpretation.) *Encéphale*, 1934, 29, 412-427.—The authors present detailed observations of a lawyer patient accused of inflicting blows and wounds on a woman whom he did not know. Two years previously he suffered a delusion of persecution with interpretations directed against his colleagues; but nothing indicated a future schizophrenia. The patient rather presented the picture of Sérieux-Capgras hallucination. The case is one of a gradual transformation of a delusion of interpretation into a schizophrenic state, the patient remaining lucid with reference to the fundamental elements of the delusion.—*M. H. Piéron* (Sorbonne).

1832. *Gerzberg, M., & Ossipova, E. [The mental hygiene of rest.]* *Sovetsk. Nevropatol.*, 1934, 3, No. 10, 37-56.—The mental hygiene indexes used in rest homes have made it possible to measure the influence of rest, and to differentiate the regimes for groups of patients with different neuropsychic deviations.—*A. Yarmolenko* (Leningrad).

1833. *Gislin, S. G. [The problem of the course of schizophrenia and the blood circulation of the brain.]* In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 61-77.—*A. Yarmolenko* (Leningrad).

1834. *Gummersbach, H. Triebhandlungen. (Impulsive actions.)* *Krim. Mh.*, 1934, 8, 244-249.—Impulsive criminal actions share the characteristics of both reflex and voluntary behavior. They are carried out relatively involuntarily, or at least without arousing a counter motive. Consciousness is so narrowed and instinct and affect so powerful that the subject is unable to take account of his actions or their results. The "short-circuit reactions" belong here, also the "blue rages" after drinking, etc. The special importance of impulsive actions for criminology lies in the small magnitude of their provoking stimuli, the clouding of consciousness, and the disproportion between objective cause and affective reaction with consequent unpredictability of behavior. The individual does not intend to injure, but realizes his helplessness against the impulse. These crimes are of a vital and immediate nature and represent wish fulfillment. The single common criminogenic factor is the drive for satisfaction. On the basis of impulsive actions arise the "manias," e.g. miserliness, collecting, alcoholism, and drug addiction. As to responsibility and treatment, the decisive factor is the danger of repetition of the impulsive act. If the

affects "stream out in passions," the person is socially dangerous.—*M. E. Morse* (Baltimore).

1835. *Harris, H. Anxiety: its nature and treatment. Part III. The treatment of anxiety.* *J. ment. Sci.*, 1934, 80, 705-715.—The psychiatrist deals with four main types of mood, all referable to conflict: anxiety, elation, depression, apathy. Anxiety, defined as unsolved conflict, is due to metabolic, visceral, and endocrine hypertensions. Treatment involves: (1) reducing the problem, as in hysteria and obsessional neuroses, to explicit anxiety reactions; (2) provision of adequate outlet for the energy bound up, which requires removal of internal and external obstacles (attitudes, environment); (3) avoidance of the stimuli producing tension; (4) reduction of the available energy, by drugs or otherwise. The two latter methods are confessedly not ideal, but are justified in some cases by the gravity of the problem. A bibliography of 33 titles is appended.—*C. J. Herrick* (Pennsylvania).

1836. *Horder, Lord. Medicine and morals.* *Lancet*, 1934, 227, 795-798.—Presidential address for the London Medical Society.—*D. J. Ingle* (Mayo Foundation).

1837. *Howard, F. E., & Patry, F. L. Mental health.* New York: Harper, 1935. Pp. xvi + 551. \$2.75.—A textbook of mental hygiene in 17 chapters, including such topics as the detection and prevention of unwholesome mental patterns, an exposition of the psychology adhered to by the authors, hygiene of the emotions, sex and its management, family relationships, child training, the concept of personality, and long sections on method, plentifully illustrated with case history material. The methods mentioned are in general the global approach of the better child-guidance clinics. There are an appendix containing further case history material, a glossary, and an index.—*R. R. Willoughby* (Clark).

1838. *Hunt, W. A., & Landis, C. The present status of abnormal psychology.* *Psychol. Rev.*, 1935, 42, 78-90.—A statistical analysis of the content of fifteen representative textbooks in abnormal psychology and seven textbooks in psychiatry. It is found that abnormal psychology is a dumping ground for miscellaneous topics left over from general psychology, including sleep, dreams, suggestion, etc. The most conspicuous defect is the lack of experimental material, of which there is only .8%. Another is the small space devoted to psychoanalysis (9%) in spite of its great influence, and a third is the limited treatment of etiology (5%), as well as of psychotherapy (2.4%) and hygiene (2.7%). The psychiatries are equally defective in experimental approach. This is unjustified, since there exists a respectable body of experimental material to draw from. The greatest need at present is a more rigid definition of the field of abnormal psychology.—*A. G. Bills* (Chicago).

1839. *Judin, T. S. [The insufficiency of the modern conception of "neuroses" from the pathogenetic, clinical, and therapeutic-practical point of view.]* *Vrach. Delo*, 1934, No. 10, 647-652.—The author

defines the three forms *neurosis*, *psychopathy*, *psychosis* as conceptions determining the degree of the development of psychic disease, the grade of its display. The further evolution (characterological and processual) of the regress of the disease is defined not by itself but by constitutional peculiarities and environmental conditions. These three forms, taken as a grade of psychic disease, make the nosological diagnosis complete. The fourth and last form is dementia.—A. Yarmolenko (Leningrad).

1840. Kaplinsky, M. S., & Shulman, E. D. [Concerning periodic sleep.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 200-232.—A. Yarmolenko (Leningrad).

1841. Kerbikov, O. V. [The role of head trauma in the genesis of non-traumatic psychoses.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 275-291.—A. Yarmolenko (Leningrad).

1842. Khaimovich, M. M. [Dermographism in involutional psychoses.] *Sovetsk. Psichonevrol.*, 1934, No. 4, 33.—In 35 patients suffering from involutional psychoses dermatographism has been found to be always of the red type. The time of the dermatographic reactions was considerably increased, and varied much more than in normal control subjects.—A. Yarmolenko (Leningrad).

1843. Kingsbury, A. N. Psychoses in cases of malaria. *Lancet*, 1934, 227, 979-982.—Among several thousand malaria patients treated with atebrin 12 are recorded as having developed a psychosis. It is supposed that atebrin may either liberate toxins or have a toxic action of its own on the central nervous system.—D. J. Ingle (Mayo Foundation).

1844. Knoblauch, E. *Vergleichende Untersuchungen zur optischen Auffassung hochgradig schwachsinniger und normaler Kinder*. (Comparative investigations of visual perception of high-grade feeble-minded and normal children.) *Z. angew. Psychol.*, 1934, 47, 305-375.—The central problem of this monograph was: What figures are perceived as similar by feeble-minded and normal children? The subjects were 20 feeble-minded children, 14 normal children, and 4 adults. The material consisted of diagrams (as circles, triangles) and of balls, cylinders and cones, each one on a separate sheet of paper. The subjects were first given two diagrams, one of which was always a solid black circle, while the other one varied. After they had learned always to choose the circle, a test series followed in which they were given a choice between two diagrams neither of which contained the original circle. The results show a marked difference between the normal and abnormal subjects. In the test series the feeble-minded children chose solid black diagrams even if they contained straight lines and sharp corners, while the normal children chose the diagrams with round outlines even if they were not solidly black.—K. F. Muenzinger (Colorado).

1845. Kosiss, E. N. [Comparative analysis of aphasia cases during recovery.] *Sovetsk. Psichonevrol.*, 1934, No. 4, 60-64.—A profound study of internal speech is of great importance for the solution of the

problem of aphasia, as well as for the prognosis. Troubles of internal speech are related to disorders of discursive thinking and understanding of speech. These disorders do not correlate with the decrease of the general intellect, and especially of the constructive technical ability.—A. Yarmolenko (Leningrad).

1846. Kraiz, S. V. [Narcomania (morphinism) as evolution of personality; and degradation in narcomania.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 311-326.—A. Yarmolenko (Leningrad).

1847. Krasnushkin, E. K. [The structure of neuroses.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 365-375.—The neurotic disorders are connected with the highest psychic guidance of personality, which regulates the social functions, and with the somatic field of personality, its physiological functions. The neurosis begins in the social conflict, and is displayed in somatic disorders. These two components are connected with affects, as the expression of somatoplasic strength of the personality.—A. Yarmolenko (Leningrad).

1848. Kretschmer, A. *A text-book of medical psychology*. (Trans. by E. B. Strauss.) New York: Oxford, 1934. Pp. 287. \$5.00.—(Not seen).

1849. Kris, E. *Ein geisteskranker Bildhauer*. (An insane sculptor.) *Imago*, Lpz., 1933, 19, 384-411.—After becoming paranoid in 1770, and during the few years until his death, the sculptor Franz Xaver Messerschmidt produced nearly a hundred so-called "character heads." At the time these were taken as a contribution to the general interest in physiognomy. On close inspection it appears that the heads are not of different characters, but of a single person expressing many different moods and conditions. They represent Messerschmidt himself experimenting, as it were, with various styles of demeanor in an effort to recover the social adaptation that was disrupted by his insanity. Certain recurring and common peculiarities of modelling may be interpreted, in further support of this explanation, in terms of tendencies that are recognized in psychoanalysis. There are twenty-nine illustrations, showing many of the heads.—H. D. Spoerl (St. Johnsbury, Vt.)

1850. Krol, O. [The dynamics of blood pressure in the involutional psychoses.] *Sovetsk. Psichonevrol.*, 1934, No. 4, 93.—The maximal blood pressure in all patients suffering from presenile, senile and arteriosclerotic psychoses shows great variations between hyper- and hypotonia, being higher in the arteriosclerotic group. The average variability during the day is the most pronounced in senile patients. If some organic symptoms are displayed a marked asymmetry of the blood pressure taken on the right and left arm was observed.—A. Yarmolenko (Leningrad).

1851. Lahy, J. M. *La psychotechnique et la psychiatrie*. (Psychotechnics and psychiatry.) *Proph. ment.*, 1934, 9, 87-103.—The author indicates the place of psychotechnics in the system of experimental sciences. It ranks with biopsychiatry, physiology, and biochemistry. Its role is to give to physicians measures of mental and psychomotor functions in

patients who are to be diagnosed. Tables of standardizations are given which bear on the following: (1) logical intelligence of the cultured and non-cultured classes; (2) mental levels for groups of high, average, and low culture who suffer from general paralysis and standards for normal subjects of the same groups; (3) standardizations of tests for memory of associated words, for memory of images, and for rapidity and regularity of reaction times with both normal and paretic subjects of both the cultured and non-cultured classes.—*M. H. Piéron* (Sorbonne).

1852. *Lebedinsky, M. S.* [Concerning the psychological characteristics of alexia in aphasics.] *Sovetsk. Psichonevrol.*, 1934, No. 4, 53.—In the psychological study of alexias their intensity and their peculiarities were investigated. There exist a great number of various transitory forms, from the normal reading ability to the complete verbal or literal aphasia, and all are of great interest. In some patients suffering from alexia there still remains the ability to recognize written words, which is however accompanied by other paralectic disturbances. The latter may be explained by assuming the presence of alterations of perceptivity. In some cases dyslexia depends on disturbances of the visual field, etc. The author is of the opinion that in certain cases of alexia, analogous troubles in other fields of perception can be found.—*A. Yarmolenko* (Leningrad).

1853. *Levi, L.* *Azione contrariante e negativismo.* (Contrary and negativistic behavior.) *Rass. Studi psichiat.*, 1933, 22, 279-298.—Contrary and negativistic behavior is very frequent both in patients and in normal people. The author seeks the origin of this phenomenon in disorders of the equilibrium of two opposed forces regulating general metabolism and particularly regulating the activity of antagonistic muscles and the association of ideas by contrast.—*R. Calabresi* (Rome).

1854. *Levin, M.* *Bromide psychoses: diagnosis, treatment and prevention.* *Ann. intern. Med.*, 1933, 7, 709-714.—A psychosis resulting from bromide intoxication may be diagnosed on the basis of concentration of bromides in the blood serum, development of the psychosis after the intoxication began, and relief of the psychosis after the discontinuance of the bromides. There are three varieties of bromide psychosis. The first is characterized by mental sluggishness, the second by delirium and the third by hallucinations. Treatment and prevention are discussed.—*D. J. Ingle* (Mayo Foundation).

1855. *Levinson, A. J.* [The role of psychic reactions.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 292-310.—*A. Yarmolenko* (Leningrad).

1856. *Lhermitte, J., & Huguenin, R.* *Narcolepsie et onirisme avec somniloquie.* (Narcolepsy and onirism with somniloquy.) *Rev. neurol.*, 1934, 41, 219-222.—An intelligent female patient is described who was afflicted with cryptogenetic narcolepsy (rare among women). During sleep her mind was never in repose, and she dreamed constantly. The case shows

excellently the relation between morbid dreams and the sleep of narcoleptics.—*M. H. Piéron* (Sorbonne).

1857. *Lottig, H.* *Psychopathische Persönlichkeiten und psychopathische Reaktionen.* (Psychopathic personality and psychopathic reactions.) *Fortschr. Neurol. Psychiat.*, 1934, 6, 489-496.—This is a survey of contributions to the field of psychopathology published during 1933. Included are reports of work done by Schneider on psychopathy and psychosis, Hadfield on the psychopathology of sexual perversions, Krausz on homosexuality and neurosis, and several others of a similar nature. There is a short bibliography.—*D. S. Oberlin* (Newark, Del.)

1858. *Macklin, M. T.* *Increase in mental defect in the province of Ontario since 1871.* *Eugen. News*, 1934, 19, 93-99.—The author attempted from early records to determine as far as possible the proportionate increase in the mentally well and the mentally ill population. The 60 years from 1871 to 1931 were studied, because in that time the population of Ontario about doubled itself. It is estimated that within the province institutional cases increased six and one-half times in the same period and their cost seventeen times. Comparing figures for 1888 and 1931, the author concluded that in 1931 "a population one and three-fifths times as large was supporting a mentally ill group four times as large at a cost that was more than ten times as great." Preventive medicine and public-health measures and the differential birth rate, which is in favor of the mentally defective, are suggested as potent factors in the increase. Both aments and dementes are included in the study.—*M. V. Louden* (Pittsburgh).

1859. *Mairhofer, M.* *Ueber hypochondrische Erscheinungen im Beginn der Schizophrenie.* (Hypochondriacal manifestations in the beginning of schizophrenia.) Munich: Salesian, 1933. Pp. 30.—(Not seen).

1860. *Melekhov, D. E.* [Concerning the classification of the schizophrenic type of reactions.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 87-97.—The author divides the schizophrenic states with psychic traumas in their genesis into four groups: (1) schizophrenic states provoked psychically: (a) the attacks of the schizophrenic process; (b) the phases of circular type and epileptic psychosis; (2) schizophrenic reactions: (a) reactions of a schizophrenic post-psychotic state; (b) reactions in the asymptomatic phase; (3) schizoid reactions: (a) the psychotic reactive state; (b) characterological schizoid reactions; (4) reactions of non-schizoid subjects: (a) oligophrenic reactions; (b) reactions of asthenic subjects; (1) infantile and hypoplastic, (2) asthenic-eunuchoid; (c) psychogenous situative reactions.—*A. Yarmolenko* (Leningrad).

1861. *Misrukhin, J. A., Minz, J. J., & Philipenko, P. D.* [The mental hygiene propaganda in psycho-neurological hospitals.] *Sovetsk. Psichonevrol.*, 1934, No. 4, 92-99.—The authors emphasize the necessity of having all mental hygiene propaganda devised only by physicians well acquainted with the patients.

The fundamental principles of mental hygiene education are given.—*A. Yarmolenko* (Leningrad).

1862. Molokhov, A. N. [On the paranoid evolution of personality, paranoid reaction, and their relation to schizophrenia.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 327-337.—*A. Yarmolenko* (Leningrad).

1863. Morgan, J. J. B. Manic-depressive psychoses of business. *Psychol. Rev.*, 1935, 42, 91-107.—An analysis of the various theories offered to explain the business cycle of alternate booms and depressions shows that all these theories are based on a superficial study of symptoms, rather than on an analysis of the real causes, which the author believes are psychological in nature. Business is compared to a patient suffering from a manic-depressive psychosis, in which the boom period parallels the manic phase and the subsequent slump parallels the depressive phase. It is argued that, in business as in the individual psychosis, the manic period is not a period of real optimism or even over-confidence, but is really a period of fear, for which the excessive speculative activity is a compensatory mechanism. This fear is induced by a lack of confidence in the credit system and a desire to beat it. Two alternative solutions are offered: one is to strengthen the credit system by building up a group of heroic leaders; but this is utopian at present. The other is to discover a better defense mechanism and adopt it.—*A. G. Bills* (Chicago).

1864. Ødegaard, Ø. *Sinnesykdom og emigrasjon II.* (Insanity and emigration. II.). *Tidsskr. norske Laegeforen.*, 1934, 54, 1007-1009.—Ødegaard showed that schizophrenia is considerably more frequent among Norwegian-born in Minnesota than in Norway, both absolutely and in relation to the frequency of manic-depressive psychoses. Two explanations are possible: (1) the social strains to which immigrants are subjected result more frequently in schizophrenia than in other psychoses, (2) the schizophrenic constitution (schizoid personality type) is relatively more frequent among emigrants than among those who stay at home. On the basis of the analysis of his data, the author favors the second explanation. The exclusion of the first explanation, as primary, does not mean that schizophrenia is slightly influenced by factors of an environmental nature, but it means that immigrants do not encounter such extraordinary adjustment difficulties as is generally supposed. This would seem plausible, at least, for Norwegian immigrants in Minnesota where there is such a great Scandinavian influx. The present article is the last in a series of discussions between the writer and Braatøy, the latter favoring the first of the two possible explanations by stressing primarily the economic, social and psychological factors involved. (See also VIII: 3625.)—*V. Coucheron-Jarl* (Mooseheart Laboratory for Child Research).

1865. Ponomarev, A. J. [Concerning recurrent schizophrenia.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 78-85.—*A. Yarmolenko* (Leningrad).

1866. Prosorov, L. A. [P. B. Gannushkin and social psychiatry.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 27-31.—*A. Yarmolenko* (Leningrad).

1867. Rambaut, D. F. Some recent forms of mental treatment. *J. ment. Sci.*, 1934, 80, 630-638.—Developments of the past forty years in the treatment of insanity are resulting in the disappearance of the old prison-like custodial hospitals, substituting care comparable with that given to physical illness. Important among these developments are: registration and training of nurses; occupational therapy; the use of reception hospitals; and somatic treatment, notably hydrotherapy, induced malaria, and the treatment of septic foci.—*C. J. Herrick* (Pennsylvania).

1868. Ratner, R. G. *Hallucinations motrices verbales de la langue dans l'encéphalite épidémique.* (Verbal motor hallucinations of language in epidemic encephalitis.) *Encéphale*, 1934, 29, 483-494.—Two cases are reported of individuals with verbal motor hallucinations of language. One was a consequence of epidemic encephalitis; the other was a case of schizophrenia. In the first case language preceded thought, and the patient perceived her discourse inside the head and in her tongue. In the second patient the hallucinations seemed a sensory confirmation of the things experienced in delusion. Language hallucinations in their turn aroused delusional interpretations and were understood by those near the patient. This case is only an episode in paranoid thinking. In the encephalitic case the author believes it necessary to envisage the hallucinations as a partial delusion.—*M. H. Piéron* (Sorbonne).

1869. Reichardt, M. *Unfallbeziehungen zu nicht-traumatischen Hirn- und Geisteskrankheiten.* (Relations of accidents to non-traumatic cerebral and mental diseases.) Berlin: Vogel, 1933. Pp. 28. RM. 1.60.—(Not seen).

1870. Roncati, C. *Sintomi inizialissimi della demenza precoce.* (Initial symptoms of dementia praecox.) *Schizofrenie*, 1933, 3, 325-334.—*R. Calabresi* (Rome).

1871. Rontchevsky, S. P. [The pathophysiology of alcohol delirium.] *Sovetsk. Nevropatol.*, 1934, 3, No. 10, 88-98.—The alcoholic delirants in their second phase of disease give curves of eye adaptation to darkness changed in comparison with the control experiment. The adaptation volume is decreased and many fluctuations are observed, which depends upon the fatigue and exhaustion of the visual nervous centers. The latter conditions allow illusory changes of perceived objects in alcohol delirium.—*A. Yarmolenko* (Leningrad).

1872. Rosenberg, A., & others. [The remnant work capacity of encephalitics and neurosyphilites.] *Sovetsk. Psichonevrol.*, 1934, No. 4, 83-88.—Encephalitic patients have for the most part a sufficient work capacity, and must not be considered wholly incapable of any professional activity. The right professional activity for them must be sought, and investigated as to its special features. The neuro-

syphilitics must be hospitalized, and the stage of the disease must define the work capacity. The chief disabling factor is ataxia.—A. Yarmolenko (Leningrad).

1873. Rosenstein, S. M. [P. B. Gannushkin, a psychiatrist of the epoch.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 13-21.—A. Yarmolenko (Leningrad).

1874. Ross, T. A. *Prognosis in hysteria and anxiety states*. *Lancet*, 1934, 227, 885-886.—Large proportions of cases of hysteria and anxiety states can be treated successfully. They are likely to remain well. Treatment need cover only a short time except where a formal analysis of the unconscious is undertaken.—D. J. Ingle (Mayo Foundation).

1875. Salmanson, A. N., & Skornyakova, S. S. [Concerning the structure of schizophrenic and epileptic thought.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 164-187.—The unity of contradictions in the structure of schizophrenic and epileptic thinking is displayed in the disorder of the inward unity of analysis and synthesis, in the change of the dialectical structure of thought—in some cases a decrease of synthesis and hypertrophy of analysis, and hypertrophy of synthesis with decreased analysis in other cases. This one-sided decrease and compensatory increase are the cause of dementia (*sui generis*) and a peculiar one-sided giftedness. This differentiates these psychoses from the organic diseases of the central nervous system, where the analysis and synthesis are disordered simultaneously.—A. Yarmolenko (Leningrad).

1876. Schjerning, O. v. *Handbuch der ärztlichen Erfahrungen im Weltkriege 1914/1918*. Vol. 4. *Geistes- und Nervenkrankheiten*. (Handbook of medical experience in the World War, 1914-1918. Vol. 4. Mental and nervous diseases.) Leipzig: Barth, 1922, 1934.—(Not seen).

1877. Seelert, H. *Symptomatische Psychosen*. (Symptomatic psychoses.) *Fortschr. Neurol. Psychiat.*, 1934, 6, 469-479.—Researches on symptomatic psychoses accompanying infectious diseases are reported. Among the investigations considered are those by Herschberg on spotted fever, in which he found many symptoms both during the fever and delirium and after the fever had abated. Melzer has found that symptomatic psychoses are rare in conjunction with tuberculosis of the lungs. Several investigations on pellagra are reported, as are also many cases of psychoses as a consequence of pernicious anemia. There is a bibliography.—D. S. Oberlin (Newark, Del.)

1878. Seinsche, —, & Müller-Hess, —. *Tödlicher Unfall als Folge perverser Neigung*. (A fatal accident as the result of a perversion.) *Krim. Mh.*, 1934, 8, 252-254.—A 16-year-old boy was found dead in bed dressed in his sister's underwear and holding a nearly empty bottle of ethyl chloride. A rubber apron was wrapped around his head as an anesthesia mask, and a rubber tube led from his mouth to the floor (apparently a safety device for air). A padlocked chain

passed around the abdomen and over the scrotum. Death was probably due to suffocation. The case is interpreted as one of accidental death during the satisfaction of sadistic-masochistic impulses.—M. E. Morse (Baltimore).

1879. Senise, T. *Concetto e aspetti della megalencefalìa*. (Concept and aspects of megalencephaly.) *Cervello*, 1934, No. 2, 71-89.—R. Calabresi (Rome).

1880. Sereisky, M. J. [Concerning the question of volume and classification of schizophrenic reactions.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. P. 98.—In 5 clinical cases of schizophrenic reactions the common trait of all is the paranoid component, which makes the schizoid reaction adequate and clear. The disorder of consciousness observed in each case proves the exogenous nature of these reactions. The clinical picture is dependent on the life situations. The author proposes for this group a new term, "functional schizophrenia."—A. Yarmolenko (Leningrad).

1881. Shostakovich, V. V. [Contributions to statistics of involutional psychoses.] *Sovetsk. Psichonevrol.*, 1934, No. 4, 20-45.—The statistics of several nations show that the percentage of involutional psychoses during the last 100 years is the same and is around 6-8%. In Russia the percentage is around 5.1% (1908-1927). Only 21.3% of brain arteriosclerosis in the group of patients was reported. The sex distribution is: males 3.8%, females 7.5%. The maximum incidence of the disease was observed at 50 years and above.—A. Yarmolenko (Leningrad).

1882. Siman, R. M., & Svensen, A. K. [Concerning psychical changes in carcinomatosis.] *Sovetsk. Nevropatol.*, 1934, 3, No. 10, 111-116.—In cases of carcinomatosis of meninges the psychotic displays depend upon the brain toxicosis. Among other neurotic symptoms the sensory hallucinations arise easily. The psychic disorders of Boenhofer's type are evoked by the carcinotoxins from lesions of meninges.—A. Yarmolenko (Leningrad).

1883. Simson, T. P. [The clinical manifestations of schizophrenia in the preschool age.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. P. 141.—In 20 cases of early schizophrenia the main traits were: (1) the beginning of the disease in the first critical age (first pubertal period—1-3 years); (2) the peculiarity of the schizophrenic degradation; (3) the easy degradation of the child to the former age periods, regressions of speech and motor thought; (4) many catatonic displays, hebephrenic traits, and amoral symptom-complex.—A. Yarmolenko (Leningrad).

1884. Sobol, M. E. [Neurological changes in patients with presenile psychoses.] *Sovetsk. Psichonevrol.*, 1934, No. 4, 30-32.—When investigating the neural condition of 57 patients suffering from presenile psychoses, in 80% neuropathological symptoms were found which were less pronounced in the paranoid and in the maniacal involutional syndromes. This shows why the involutional psychoses must be

classified among the organic diseases of the central nervous system.—*A. Yarmolenko* (Leningrad).

1885. *Somukhin, N. V. [Dementia in Wilson's disease.]* In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 254-261.—*A. Yarmolenko* (Leningrad).

1886. *Strakosch, F. M. Factors in the sex life of seven hundred psychopathic women.* Utica: State Hospital Press, 1934. Pp. 102.—The incidence of overt sexual activity, as noted in the case histories of 700 psychopathic women, was studied and compared with the normal data of Davis, Dickinson and Beam, and Hamilton. In the occurrence of masturbation there was no significant difference, but it is tentatively concluded that the psychopaths tend to continue the practice longer and to develop guilt reactions. Due to incomplete data on frequency the evidence is not unequivocal. Premarital relations were not closely associated with the development of the psychotic or psychoneurotic personality, nor did differences in age and in economic and educational status seem to be associated in the psychopathic group with indulgence in heterosexual relationships before marriage. Homosexual behavior was more frequent with higher educational and mental level among the psychopaths, thus corroborating previous findings in normals. However, the number of psychopathic women in which homosexual behavior was reported was unexpectedly small. The number of women who were maladjusted in marriage was higher in the psychopathic group than in the control groups. This maladjustment was very closely associated with unsatisfactory sex relations. Age and education did not affect marital adjustment in either the psychopathic or the normal comparison groups. The incidence of auto-erotic practice, premarital relations and homosexuality did not vary significantly with the personality types associated with the various diagnostic categories. The dementia praecox and psychoneurotic patients were more maladjusted in marriage than the manic-depressives, and the investigator believes that they also had more unsatisfactory sex relations than the manic-depressives. The cases diagnosed as "psychopathic personality" showed high percentages of almost all varieties of sex practices, but the small number of cases in this diagnostic category does not warrant the conclusion that sex is a psychogenic factor in these cases. In general, the results lend no support to the hypothesis that overt expressions of the sex drive bear a relationship to the psychotic or psychoneurotic personality. The results on marital adjustment are best interpreted in terms of the deficient social adaptation characteristic of the abnormal personality.—*T. W. Forbes* (N. Y. Psychiatric Institute).

1887. *Sukhachevski, S. M. [Scientific cinematography as a new method in psychiatry.]* In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 433-442.—*A. Yarmolenko* (Leningrad).

1888. *Susternik, R. E. [Concerning the therapy of schizophrenia, from the modern theoretical point of view.]* In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 128-140.—*A. Yarmolenko* (Leningrad).

grad: Biomedgiz, 1934. Pp. 128-140.—*A. Yarmolenko* (Leningrad).

1889. *Susternik, R. E., & Frumkin, J. P. [Concerning the so-called induced monomania.]* In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 349-364.—*A. Yarmolenko* (Leningrad).

1890. *Toulouse, E. La violence et l'hygiène mentale.* (Violence and mental hygiene.) *Proph. ment.*, 1934, 9, 82-87.—Physical violence is a form of the combative instinct which, united with the instinct of conservation, assures the welfare of the individual and the species. This normal instinct is the result of an equilibrium of all functions. It varies with age, sex, and education. It is easily exaggerated by rhythmic chants, poetry, and public fêtes. These stimulations render more and more difficult the arrest of the impulses which have been aroused. However, the instincts purify and sublimate themselves, and the sentiment of equilibrium may replace the will to power. These latter more recent forms are by that fact the more unstable, the more fragile; and in the general population there are groups of individuals belonging to biotypes which have not all reached the same age of nervous perfection.—*M. H. Piéron* (Sorbonne).

1891. *Tretyakov, K. N. [Functional and social compensation in organic diseases of the nervous system.]* *Sovetsk. Nevropatol.*, 1934, 3, No. 10, 10-20.—Compensation is a complex of methods and means having as their aim the restoration of physiological and social functions of the organism lost in the disease, these methods being a palliative and not a treatment. In accentuating the katamnestic part of the investigation the author states the value of restoring the social and working functions of the patient which can be obtained in using the compensatory methods.—*A. Yarmolenko* (Leningrad).

1892. *Van der Scheer, W. M. Educational principles in occupational therapy.* *J. ment. Sci.*, 1934, 80, 650-657.—The insane can be taught, by calm, consistent, and immediate application of the rules set up, at least a logical responsibility for their actions. Provision of appropriate conditions for different types of patient showed "that the abnormal behavior of mental patients was, for the greater part, a secondary symptom, and that the degree of order, quiet and contentedness in a mental hospital runs for more than 75% parallel with the degree of employment." Insomnia and prolonged restlessness can be prevented; 90% of the patients can be at regular work; and various forms of punishment and restraint can be almost eliminated.—*C. J. Herrick* (Pennsylvania).

1893. *Vassilyeva, N. S. [Schizophrenics in industry.]* In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 156-163.—*A. Yarmolenko* (Leningrad).

1894. *Vvedensky, S. N. [The syndrome of delusion of love and its value in forensic psychiatry.]* In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. P. 114.—*A. Yarmolenko* (Leningrad).

1895. Weiss, E. The study of the emotional life in the practice of medicine. *Med. Rec., N. Y.*, 1935, 141, 68-71.—The author discusses the frequency of patients in general medical practice whose illnesses have no definite organic origin or are in a large part a manifestation of emotional disturbances, and cites various studies made in this regard. Two case histories are given to illustrate this problem and the inadequacy of the average physician's approach to it, and to portray the frequent necessity of personality studies in the treatment of illnesses both of a "functional" character and those of a chronic organic nature. A discussion of sexual factors follows, with emphasis upon the need of a sound appreciation of psychotherapy by the physician.—M. H. Erickson (Eloise Hospital).

1896. Wittkower, E. Further studies in the respiration of psychotic patients. *J. ment. Sci.*, 1934, 80, 692-704.—Type of respiration of 302 psychotic and 40 normal subjects was studied by means of the Golla and Antonovitch plethysmograph. A preponderance of regular breathers was found among schizophrenic as compared with normal subjects. This finding is discussed with reference to a previously noted relationship between regular breathing and visual imagery, but no conclusion is reached. Ventilation was studied for 123 schizophrenics: sometimes there was no difference from normals; in other cases shallow breathing was compensated or hypercompensated by greater frequency.—C. J. Herrick (Pennsylvania).

[See also abstracts 1776, 1786, 1800, 1899, 1912, 2007.]

#### PERSONALITY AND CHARACTER

1897. Bacon, C. The influence of psychologic factors upon gastro-intestinal disturbances: a symposium. (2) Typical personality trends and conflicts in cases of gastric disturbance. *Psychoanal. Quart.*, 1934, 3, 558-573.—Four cases of gastric disturbance characterized by minor subjective gastric complaints are reported in some detail to illustrate personality trends and conflicts. Analysis of the cases disclosed superficial pictures of strong self-reliant personalities with rejection of and denial of deeper strong passive receptive attitudes, with the surface attitude constituting a protection and reaction against wishes for dependency. The origin of the strong receptive trends was found to be an early oral deprivation, with the onset of gastric symptomatology dependent upon gratification of passive receptive desires. The individual trends in each case are discussed in detail, and analysis of the various cases revealed the phenomena of oral receptive and oral aggressive tendencies, masochistic conception of the feminine role, and guilt reactions connected with oral reception and oral castrative desires. Failure of the surface adjustments resulted in a retreat to organic symptomatology.—M. H. Erickson (Eloise Hospital).

1898. Crespo, E. El narcisismo. (Narcissism.) *Arch. argent. Psicol. norm. patol.*, 1934-1935, 1, 72-75.—The narcissistic individual over-compensates for lack of ability to adapt to his environment by exaggerated

self-evaluation and an auto-erotic condition. The normal individual is well adapted to his milieu and is likened to a pyramid resting on its base; the narcissistic to an inverted pyramid.—R. M. Bellows (Ohio State).

1899. Deutsch, H. Don Quijote und Donquijotismus. (Don Quixote and quixoticism.) *Imago, Lpz.*, 1934, 20, 444-449.—Don Quixote is analyzed as passive, feminine, impotent. His paranoia involved the complete suppression of instinctive tendencies and the alienation of his ego-ideal. Sancho Panza represented all that he was not.—H. D. Spoerl (St. Johnsbury, Vt.)

1900. Hardy, M. C. The out-of-school activities of well adjusted and poorly adjusted elementary school pupils. *Psychol. Bull.*, 1934, 31, 750-751.—Abstract.—J. F. Dashiell (North Carolina).

1901. MacKinnon, D. W. Personality differences between violators and non-violators of a prohibition. *Psychol. Bull.*, 1934, 31, 727-728.—Abstract.—J. F. Dashiell (North Carolina).

1902. McKinney, F. Concomitants of adjustment and maladjustment in college students. *Psychol. Bull.*, 1934, 31, 734-735.—Abstract.—J. F. Dashiell (North Carolina).

1903. Morosov, V. M. [Concerning over-estimating ideas.] In *Pamyati P. B. Gannushkina*. Leningrad: Biomedgiz, 1934. Pp. 338-348.—A. Yarmolenko (Leningrad).

1904. Munn, N. L. Our much maligned human nature. *Pittsb. Rec.*, 1934, 9, No. 2, 9-12.—The author argues "that the undesirable aspects of human nature, those aspects that are said to block the social advancement of mankind, are not foreshadowed in original nature; that original nature is remarkably plastic; that it fails to manifest evidence of pugnacity *per se* or of acquisitiveness *per se*; and that it is the modification of this nature by undesirable social influences that renders adult human nature so apparently incorrigible."—R. H. Brown (Clark).

1905. Roback, A. A. Personalysis: a study in method. *Character & Pers.*, 1935, 3, 144-156.—The author revises the psychographic chart of Allport so as to give more emphasis to the conative and affective elements. Allport criticizes the revision to the effect, first, that temperaments and life interests are separate categories and that each does not constitute a continuum, and second, that the theory of personality types is untenable. These criticisms are discussed by the author.—M. O. Wilson (Oklahoma).

1906. Schreider, N. D. [Concerning the study of characterological changes in the working youth.] *Sovetsk. Nevropatol.*, 1934, 3, No. 10, 77-87.—In studying the working youth in the dynamic development of character the following groups were defined: (1) sthenics with firm tendency, emotionally stable, sure in their aims; (2) asthenics, sensitive, with tendency to depression; (3) syntonic, emotionally labile subjects; (4) emotionally flat, torpid subjects; (5) emotionally excitable subjects.—A. Yarmolenko (Leningrad).

1907. Wittels, F. *Der psychologische Inhalt von Männlich und Weiblich.* (The psychological content of masculine and feminine.) *Imago*, Lpz., 1934, 20, 411-424.—On the level of the ego, masculine and feminine are what is *experienced* as masculine and feminine, it being understood that the English term "experience" is inadequate in conveying the meaning of the German *Erlebnis*. This possessing of one by the intention that anything, including oneself, is masculine or feminine may apply alike to individuals and to cultures. The problem as to the psychological content of masculine and feminine on the level of the id is more difficult. Here the terms seem to specify that which contributes the most to the completion of the masculine or the feminine. All distinctions are generally relative for many levels of the person, in recognition of Freud's bisexual theory.—H. D. Spoerl (St. Johnsbury, Vt.)

[See also abstracts 1596, 1652, 1762, 1806, 1820, 1829, 1835, 1862, 1912, 1937, 1991, 2022.]

#### SOCIAL FUNCTIONS OF THE INDIVIDUAL

1908. Ach, N. *Ueber die Determinationspsychologie und ihre Bedeutung für das Führerproblem.* (Determination psychology and its significance for the leadership problem.) Leipzig: Barth, 1933. Pp. 15. RM. 0.80.—(Not seen).

1909. Baranyai, E. *Az olvasás készségének kapcsolata az értelmezéssel.* (Reading ability and its relation to intelligence.) [In] Essays from the Pedagogical Department of the Francis Joseph University, Szeged, Hungary. Ed. by Imre Sándor, 1934. No. 6-12, 73-84.—The reading of 309 school children 9-13 years old was examined with two texts of 1000 syllables each, the one an easily intelligible story, the other a philosophic text. Each child was also examined ophthalmologically. There was found a generally low, but always positive correlation between the time required and number of errors in reading and the general record of school progress in theoretical subjects of instruction. The association was as follows:

	School progress		
	good	medium	bad (%)
<i>Poor readers</i>			
slow	10.0	53.6	36.4
incorrect	9.6	61.5	28.9
<i>Good readers</i>			
quick	40.3	45.7	14.0
correct	49.2	40.3	10.5

Ophthalmologic research shows that weakness in permanent reading comes often from far-sightedness, which is often connected with poor learning. Of 17 weak pupils, 13 were far-sighted (76.4%), 5.8% near-sighted, 5.8% normal; of pupils with good school progress only 4 (30.7%) were far-sighted, 3 (23%) near-sighted, 30% normal. Hungarian pupils are more often far- than near-sighted. Reading facility seems to be connected not only with the degree of intelligence, but also with the kind of refractive

weakness and with other factors.—P. Ranschburg (Budapest).

1910. Bodkin, M. *Archetypal patterns in poetry.* New York: Oxford Univ. Press, 1934. Pp. 340. \$4.50.—R. R. Willoughby (Clark).

1911. Bohn, G., Alphandéry, P., Hardy, G., Lefebvre, G., & Dupréel, E. *La foule.* (The mob.) Paris: Alcan, 1934. Pp. 145. 15 fr.—The problem under discussion is the nature and role of the mob in society and the role of the individual in the mob. Bohn discusses gregariousness; Hardy, the mob in so-called primitive societies; Alphandéry, historic and religious mobs; Lefebvre, revolutionary mobs; and Dupréel, diffuse mobs and public opinion.—M. H. Piéron (Sorbonne).

1912. Bührig, W. *Het schrift van een schooljongen.* (The writing of a schoolboy.) *Tijdsch. wetensch. Graphol.*, 1934, 6, 118-119.—A comparison of two samples of the handwriting of a 12-year-old boy showed that the child had an organic disorder which caused him to write very different scripts at different times. Analysis showed that he was decidedly egocentric and sensitive, with pronounced feelings of inferiority. Though intelligent and interested in mathematics, he nevertheless was slow in perception and understanding. His ability could not keep pace with his conscientiousness and ambition. These are held to be symptoms of partial cretinism, and it is suggested that due to the teacher's graphological and psychological interests, which resulted in this analysis of writing, the further development of this disease could be checked.—H. Beaumont (Kentucky).

1913. Chevais, M. *Tests d'aptitude musicale.* (Tests of musical aptitude.) *Bull. Soc. A. Binet*, 1934, 34, 115-139.—The tests are not planned for vocational guidance, but to determine whether or not there are children inaccessible to music, and to make available for teachers some exercises in the form of tests which will facilitate the adaptation of musical instruction to various types of children. The first series of individual tests concerns pitch perception, similarities of sounds, perception of the direction of an interval, the approximate recognition of the extent of an interval, the tone sense, and the perception of simultaneity of sounds. The second series of (group) tests involves the comparison of two sounds, of two intervals, of two intensities, of two melodies, and of rhythms. In addition various exercise tests have been used for control: comparison of musical pleasure, translation of movement, maintenance of rhythm, and immediate memory.—M. H. Piéron (Sorbonne).

1914. Chou, S. K. *An analysis of judgments of positions of Chinese characters by American subjects.* *J. Testing* (Chinese), 1934, 2, No. 1, 29-62.—This paper is a 4th report of the author's studies in reading and legibility of Chinese characters. It had been pointed out in the last report that when a special group test was devised to determine the main cues used by 142 American subjects in marking out the true positions of 312 Chinese characters, it was found that the characteristic differences between the hori-

zontal and vertical lines were most suggestive of the true position of a Chinese character. There were 105 persons who marked every one of the 312 characters, while the other 37 subjects missed voluntarily or carelessly a varying number of characters. The faithful markers correctly marked 154 characters, while the average of the whole group was 149, about 48%. In the present paper, (1) most of the subjective cues used by these American subjects in determining the position of a Chinese character are verified by an analysis of their judgments. But it is found that the two special cues that all horizontal lines have a little bump on the upper end of the stroke and that there are more horizontal strokes than vertical ones have nothing to do with the correctness of judgments. (2) According to the author, the high percentage of correct judgments of Chinese characters may be explained by their intrinsic "Gestalt" qualities, such as symmetry, organization, balance, stability, etc. The influence of these qualities clearly indicates that the psychology of Chinese characters is but a special case of general Gestalt psychology. (3) On the other hand, a study of these Chinese characters when classified according to the interrelationships of their unit strokes into several groups does not show us that there is any difference in the percentage of correct judgment of the positions of the characters among the groups. (4) Finally, the effect of the "Gestalt" characteristic of the Chinese characters on reading, recognition, and legibility, may also be seen from the experiments of Hull, Kuo, Liu, Wylie, and Tsai and Abernethy.—C.-F. Wu (Nat. Res. Inst. Psychol., Shanghai).

1915. De Mandato, M. *La primitività dell'abitare umano.* (The primitiveness of human dwellings.) Turin: Fratelli Bocca, 1933. Pp. 130. 18 L.—The first part of the monograph is concerned with theoretical and methodological studies. The second part is an application of these general observations to the primitive habitations which are found in some regions of Italy. The author states that man is "primitive" as often as he makes a new adaptation. Although man evolves in one of his adaptations, he is beginning to evolve in others with a simultaneous or successive relationship to the correlation existing between the isolated adaptations. Primitiveness may exist a second time during a period of decadence. In any case, primitivity is not an historical phase, but a natural character which accompanies man in his evolution. The end of human habitation is the protection of man from his environment without detaching him from it. In his examination of the plurality of psychic manifestations which determine the phenomenon of habitation, the author distinguishes two forms of dwellings, one of which has the character of primitivity and can be recognized in the large cities in a latent form.—R. Calabresi (Rome).

1916. Doll, E. G. [Ed.] *Handbook of casework and classification methods for offenders.* New York: Committee on Casework, Methods, and Treatment for Prisoners of the American Prison Association, 1934.—The general problem of casework and classifi-

cation methods systematically discussed under the following headings: (1) introduction, (2) philosophy and standpoints, (3) objectives of casework, (4) casework administration, (5) casework methods and personnel, (6) correlation of casework data, (7) classification groups, and (8) treatment program.—R. Smith (Clark).

1917. Folsom, J. K. *The family: its sociology and social psychiatry.* New York: Wiley, 1934. Pp. 604. \$4.00.—"This book aims to integrate the various scientific approaches to the study of family phenomena. It attempts to weave cultural anthropology, individual psychology, social psychology, history, sociology, economics and psychiatry into a unitary *science of the family.*" Part I deals with the family pattern and its sub-cultural basis and includes a discussion of love and the formation of personality. Then follows a section devoted to the cultural history and geography of the family. Part III deals with social changes and the family including the effects of biological and psychological discovery. Part IV consists of a discussion of family problems and mass readjustments: control of reproduction, economics of children and the home, marriage and mate finding, divorce, and the love mores; while Part V deals with family problems and individual adjustments. This includes chapters on family disorganization and personality: marital roles, frustrations and interaction, and the parent-child relation. Finally in Part VI the author hazards a guess as to the cultural future of the family; namely, "the family pattern of the majority . . . will embody monogamy, a fecundity nicely adjusted to population and eugenic needs through contraception, female labor . . . more specialized and more evenly distributed, . . . more communalization of domestic services, but with the retention of just enough of the private home and parental care to yield the maximum emotional values of the parent-child and mate-mate relation." The book is well documented and constitutes a valuable summary of research studies in the field of marriage and the family. An appendix includes bibliographical sources, 29 suggested research projects and a survey of certain investigations now being conducted.—E. L. Kelly (Connecticut State College).

1918. Fossi, P. *La conversione di Alessandro Manzoni.* (The conversion of Alessandro Manzoni.) Bari: Laterza, 1933. Pp. 316.—The author studies the modifications of Manzoni's religious convictions and establishes the relation between the poet's conversion, the conditions of his family (marriage and the birth of children), and the state of his health with special reference to the neuroses from which he suffered. He concludes that the indicated motifs fail to explain the "miraculous" phases of the conversion.—R. Calabresi (Rome).

1919. Gemelli, A., & Pastori, G. *La durata minima delle vocali sufficiente alla loro percezione.* (The minimal duration of vowels required for perception.) *Arch. Ital. Fisiol.*, 1934, 33, 440-452.—The authors have sought to measure the least duration necessary for perceiving vowels and to determine whether or

not this duration is related to the pitch of the voice tone, i.e. to the frequency of the fundamental tone. An oscillograph was used to measure complete words, the duration of vowels, and the number of relative oscillations. Three types of sound waves were recognized: the first were large, with perfect periodicity and great complexity, and corresponded to the deep vowels; the second were small in amplitude, of considerable duration, of high frequency, aperiodic, and corresponded to the expirational vowels; the third type is characterized by a series of oscillations which have a still larger amplitude and duration, which are of evident periodicity but also reveal regular cycles in form and amplitude, and which correspond to the acoustically more complex vowels. The more important conclusions are as follows: The duration of the phoneme decreases in size with an increasing shrillness of the voice. The frequency of vibration is of greater importance than the duration. In each vowel the number of typical periods is less than the number of atypical ones. The minimal number of typical cycles is independent of the duration of the cycle. Two is the minimal number of complete vibrations for the perception of the vowel.—*R. Calabresi* (Rome).

1920. *Gemelli, A., & Pastori, G. Ricerche eletroacustiche supra il "timbro di voce" nel linguaggio parlato.* (Electro-acoustic investigations on the "timbre of the voice" in spoken language.) *Mem. R. Accad. Ital.*, 1934, 6, 65-117.—The authors define voice timbre as the totality of elements which make possible the recognition and distinction of one voice from another independently of what is pronounced and of the frequency and intensity of the waves composing the phoneme. These factors are more numerous in the vowels and are lacking in the silent consonants. The following factors make possible the recognition of voice: (1) the deviations of fundamental frequencies of each typical vowel from its average; (2) the numerical variations and the reciprocal relations of amplitude and harmonic phase; and (3) the individual small and continuous variations in the cyclic oscillations which constitute the vowels and semi-vowels.—*R. Calabresi* (Rome).

1921. *Guerin, P. Pensée constructive et réalités spirituelles. Essai de psychologie formelle à propos de l'ascétisme religieux.* (Constructive thought and spiritual realities.) Paris: Alcan, 1934. Pp. 453. 40 fr.—The first part treats of religion in the church (method, object, object and value of the understanding which is obtained from it, the object and the subject). The second part treats of religion in the soul (indifference, contemplation, detachment, mortification, fervor, hope and charity). The conclusion indicates the position of the author, given with philosophical objectivity and without theological bias; for him religion is the life of man above and beyond himself. A bibliography of about 280 works completes the study.—*M. H. Piéron* (Sorbonne).

1922. *Hevner, K. Appreciation of music and tests for the appreciation of music.* *Univ. Ore. Publ.*, 1934, 4, No. 6, Part IV, 83-151.—Section A is a review of the experimental studies in appreciation of music,

and tests for appreciation, from 1897 to 1932; bibliography of 53 titles. Section B contains an analysis of the activities involved in appreciation of music, a discussion of the advantages and disadvantages of applying objective methods to problems in esthetics, and of the criteria of beauty used in devising appreciation tests. Section C describes a scale for attitude toward music, a test for musical concepts, and a music discrimination test. This latter test has been recorded on seven phonograph disks by the Victor Company, and is distributed by the C. H. Stoelting Company. Section C includes a complete description of the test with sample items of the music. Norms and intercorrelations are reported, and reliabilities of .86, .78 and .63 with college, senior high school, and junior high school students respectively. This part of the monograph will serve as a handbook for administering and scoring these tests. (See also IX: 348.)—*K. Hevner* (Minnesota).

1923. *Jaworsky, B. Die Struktur des melodischen Geschehens.* (The structure of melodic experience.) *Arch. ges. Psychol.*, 1934, 92, 315-344.—Innately we have the ability to detect tonal instability and a tendency to find tonal stability. Three factors are to be noticed in the hearing field: (1) analysis of the hearing experience into active units; (2) the emphasis of some of these separate units; (3) the coordination of such units into a pattern. The tonal experience, its dependence upon the attentive act, and the tendency to reduce instability to tonal stability are discussed. The characteristics of unity and diversity are compared with the same in pictorial art. Musical composition is analyzed into its construction principles, which are illustrated in the text. The evolution of musical composition is traced, and is illustrated from the compositions of the masters of various periods.—*A. B. Herrig* (Michigan Central State Teachers College).

1924. *Johnson, C. S. The negro college graduate: how and where he is employed.* *J. Negro Educ.*, 1935, 4, 5-22.—In a total of 5512 negro college and professional graduates, 204 different male occupations and 104 different female occupations are represented. 72% of these were in professional fields and 40% in the educational field alone. Agriculture, natural science, and business have drawn very few graduates. The proportion of clergymen among college graduates is not only less than it was twenty years ago, but less than that of lawyers, elementary school teachers and housewives. Omitting the field of insurance, there are more railway-mail clerks and carriers than business men. About twice as many graduates from northern colleges enter public service; while more southern graduates enter trade. In the broad divisions of classification the proportion for other fields is approximately the same for the northern and southern graduates. In terms of negro population density, the 12 southern states have 12 college graduates, the northern 22, the western 23 and border states 36.5 per 10,000 negro population. Negro librarians seem to be the only professional group normally distributed. There is a gradual expansion of vocational

opportunities. More graduates are needed in the medical field. The disparity between the negro and white ratios in the educational field is not so great as in medicine. Better prepared and better paid teachers are needed, however. Ministry is the profession next largest to education, yet the proportion of negro professionals to population is greater than in the white population. There is a trend toward better preparation for the ministry than formerly. Business as well as agriculture offers a field for more negro graduates. Social and natural science also offer opportunities for the trained worker.—*H. S. Clapp* (Grasslands Hospital, Valhalla, N. Y.)

1925. *Klineberg, O. Negro intelligence and selective migration.* New York: Columbia Univ. Press, 1935. Pp. xii + 66. \$1.25.—A report of a research planned by the author and carried out by several M.A. candidates under his direction. By investigation of the school records in Nashville, Birmingham and Charleston it was determined that the children of parents who had migrated were not, on the average, significantly different in school abilities from those of parents who had not migrated. Then by a series of intelligence-test studies of negro children of ten and twelve years in New York City it was established that in general the intelligence level is positively correlated with the duration of residence in the city; possible alternative factors like race mixture are suitably controlled. Additional problems, such as sex differences, are touched upon, and orienting chapters, bibliography, and index are provided.—*R. R. Willoughby* (Clark).

1926. *LaFollette, C. T. A study of the problems of 652 gainfully employed married women home-makers.* *Teach. Coll. Contrib. Educ.*, 1934, No. 619. Pp. xi + 208.—A questionnaire of 895 items was sent out during January and March, 1932, to married women who were gainfully employed. The returns from the nine geographical divisions of the United States varied from 5% in New England to 21% in the Middle Atlantic states. The replies were anonymous. Data were secured concerning the education and occupational history of 652 women and their husbands, their living conditions, recreational and social activities, and family relationships. 67% of the women were working to "meet economic necessity"; 19% of the husbands were unemployed. 66% had no children; the remaining 34% had an average of 1.78 children. The 652 women employed 540 other workers. "Five hundred and seventy-four women advise other women to marry even though it is necessary for them to continue their gainful employment." The bibliography lists 97 titles.—*J. M. Stalnaker* (Chicago).

1927. *Lasswell, H. D. World politics and personal insecurity.* New York: Whittlesey House (McGraw-Hill), 1935. Pp. vii + 307. \$3.00.—The book is a series of lectures embodying an attempt to throw some light on political problems by means of the results from psychoanalysis. There are 11 chapters in four parts: method, symbols, conditions, and control. The first consists of a configurative analysis of "world

value pyramids"; the second is concerned with identification, violence and security, equality, and supremacy, and the political movements which embody these; the third deals with goods and services, news, travel, and local culture; the fourth is a consideration of the principal problem of world unity, viz., the discovery and utilization of acceptable symbols to motivate the necessary identifications.—*R. R. Willoughby* (Clark).

1928. *Leonhardt, C. Die Verwertung des Ausfalls der Unschuldsymptome in einem Falle bestrittener Täterschaft.* (Evaluation of the absence of symptoms of innocence in a contested criminal case.) *Krim. Mh.*, 1934, 8, 265-269.—Leonhardt has developed two procedures to determine whether a defendant's non-committal behavior is due to character peculiarities, to a disturbance precipitated by the accusation, or to guilt. They are based on the contrasting reactions of the guilty and the innocent to accusation. The first is on the defensive; the second denies the charge frankly and vehemently, talks eagerly and informatively, and is tense and observant. The first method consists in unexpectedly switching to indifferent topics. A previously wary or apparently indifferent defendant becomes frank and expansive, only to relapse into his earlier attitude when the crime is again mentioned. The second procedure is to accuse the subject of a similar but milder offense of which he is obviously guiltless. He suddenly rouses and denies it with normal vigor. This shows at least the probability that he is guilty of the first crime. The author narrates a doubtful case in which these methods were used with the above results and the interpretations were confirmed by characterological study.—*M. E. Morse* (Baltimore).

1929. *Loeffler, F. Die Zuhälterbewegung und ihre Bekämpfung.* (Procurers' activities and their control.) *Krim. Mh.*, 1934, 8, 277-278.—Loeffler describes the various forms of procuring and prostitution in Beuthen, on the Polish border, and the unsuccessful fight against them. The present-day procurer does not sneak along behind a prostitute. He is a capitalist, her business manager on a commission basis. Procurers do not incline to crimes of violence or aggression. An aggressive professional criminal is not a procurer, as that would be incompatible with his masculine attitude. Procurers' crimes are often committed during intoxication and have nothing characteristic about them. Other common offenses are petty thievery and robbing drunken persons. Prostitution and procuring have always existed, and always will; the best that can be attained is to keep them harmless and under control. The imposition of work sentences is the most effective method of frightening procurers.—*M. E. Morse* (Baltimore).

1930. *Magnino, C. Il complesso etnico dei Carpazi.* (The ethnic complex of the Carpathians.) Rome: Inst. Europa orient., 1933. Pp. 191. 20 L.—The author presents the fundamental psychological characters common to the different Carpathian groups as well as the specific tendencies of each group. The types of migration and colonization are treated in

relation to the rural aptitudes of the people. Consideration is given to types of homes, dress, the manifestations of religious orthodoxy, magic rites, and the primitive modes of life.—R. Calabresi (Rome).

1931. Mandolini, H. *Patología del sentimiento estético*. (Pathology of the esthetic sentiment.) *Arch. argent. Psicol. norm. patol.*, 1933-1934, 1, 61-64.—The creative mind of the artist is related to pathological minds, but the two are not the same. While the new and creative in art requires a degree of abnormality which is not too far removed from group standards, the paranoid mind is separated from the minds of the group by impermeable barriers. The artist is leader, while the alienated stands apart. The author's view is exemplified by reference to the character of celebrated artists.—R. M. Bellows (Ohio State).

1932. Mariconde, P. *El elemento biológico y social en la noción del delito y de la peligrosidad criminal*. (The biological and social element in the concept of crime and of the dangerous criminal.) *Rev. Criminol. B. Aires*, 1934, 21, 595-600.—In attempting to prevent or repress crime the problem must be attacked from the developmental, biosocial point of view. Treatment and penalization for crime must tend toward social readaptation—the concept of "criminal type" precludes the desired end.—R. M. Bellows (Ohio State).

1933. Matwejoff, S. N. *Zur Identifizierung der Unterschriften*. (Identification of signatures.) *Arch. Kriminol.*, 1934, 95, 91-103.—Both the curves of inclination of the upright lines and the relation of the individual letters to the base line are very reliable characteristics, particularly for the identification of signatures, as in such specimens the conditions are strictly analogous. The amplitude of the curves is determined by the change of the point of support for the hand. They are almost constant for any one writer and it is practically impossible to imitate them consistently. The relation of a letter to the base line is usually determined by its position in the amplitude, rising toward the middle and sinking toward the end. Identification cannot, however, be made on these two characteristics alone. The author has used this method successfully for several years. He explains the procedure in detail with the analysis of numerous signatures and some forgeries.—M. E. Morse (Baltimore).

1934. Mayer, R. M. *Zulässige und unzulässige Schreibhilfe*. (Admissible and inadmissible help in writing.) *Arch. Kriminol.*, 1934, 95, 203-208.—The amount of help legally allowed sick or senile persons in writing and signing their wills must never go so far as to prevent the testator making a willed movement. The question is whether he determined the form of the script or was under another's guidance. Free formation of the script indicates the testator's free will. A small amount of help (support of the arm) facilitates the expression of the testator's will, but the expert must know the graphological differences between support and guidance of the hand and decide whether the admissible degree of help has been ex-

ceeded. The outstanding characteristics of the script of old and bedridden persons are tremor and ataxia. With simple support of the hand both the ataxia and many individual peculiarities are lost, but the tremor remains. With guidance of the hand, tremor also disappears and the characteristics of the helper's script begin to appear. Features in contradiction with the testator's usual handwriting indicate an illegal intention on the part of the assistant and an attempt to disguise his own script.—M. E. Morse (Baltimore).

1935. Metelmann, K. *Die monatlichen Selbstmord-Sterbeziffern unter den Gesichtspunkten der Jaenschchen Typologie*. (The numbers of monthly suicides from the points of view of Jaensch's typology.) *Z. angew. Psychol.*, 1934, 47, 376-386.—There are more suicides in the summer than in the winter months, but marked differences are found between the various German states and also between the different European countries. The author points out that regions which contain more inhabitants of a type called by Jaensch disintegrated (blue-eyed, fair-skinned), seem to have a relatively higher rise in the summer than other regions where the integrated type (brown-eyed, dark-skinned) predominates. The integrated type, according to Jaensch, is adapted to the sunlight and the disintegrated type to the diffuse daylight.—K. F. Muensinger (Colorado).

1936. Meyer, H. *Ein Fall von familiärer sexueller Perversion*. (A case of familial sexual perversion.) *Arch. Kriminol.*, 1934, 95, 249-250.—In this case two brothers and the paternal uncle carried out spontaneously the same form of exhibitionism under almost identical circumstances. Mental disease and previous sexual abnormalities were absent.—M. E. Morse (Baltimore).

1937. Miller, L. W. *A critical analysis of the Peterson-Thurstone war attitude scale*. *J. educ. Psychol.*, 1934, 25, 662-668.—The scale was checked by 290 freshmen and sophomores in college. There are large variations in the numbers checking each item, even in the case of items which have approximately equal scale values. Most subjects check items which vary widely in scale value. "Several groups of items with widely varying scale values have approximately equal mean score values. These items are of little value in discriminating levels of attitude." "The average number of items checked is 11 or more than half of the items of the scale."—J. A. McGeoch (Missouri).

1938. Newcomb, T. M. *Behavior observations as a measure of individual acceptance by a summer camp group*. *Psychol. Bull.*, 1934, 31, 726-727.—Abstract.—J. F. Dashiell (North Carolina).

1939. Piotrowski, Z. *The cerebral dominance theory of reading difficulties*. *Psychol. Bull.*, 1934, 31, 740-741.—Abstract.—J. F. Dashiell (North Carolina).

1940. Polke, —. *Vergetäuschte Verbrechen*. (Simulated crimes.) *Arch. Kriminol.*, 1934, 95, 104-126.—The gravest crimes may be simulated to attain a

harmless end or to relieve the sheer monotony of existence. On the other hand, a simulated crime may be the last resort of the desperate. "Put-up jobs" to obtain insurance have increased in recent years. Psychopaths' tales of assault may have some basis in fact, yet there is a superstructure of fantasy (sometimes a dream), with anxiety, justified fear of punishment, and a normal desire for sympathy. Genuine amnesia for parts of the episode may exist. The characteristics indicating simulation are: Seldom is a definite person accused. There are almost always small features overlooked by the amateur but inconsistent with professional work. "Too much" betrays the simulator. Skilful questioning always brings out variations and contradictions in the narrative. The simulator, however, may tell a more circumstantial story than a real victim could, and he also tries to confuse the investigation.—*M. E. Morse* (Baltimore).

1941. Pulver, M. *Sociale gevolgen der aandrijfsten. Drie analyses ter illustratie van de wijze waarop de aandrijfsten in het handschrift tot uiting komen. II.* (Social consequences of drives. Three analyses of the manner in which drives are expressed in handwriting. II.) *Tijdsch. wetensch. Graphol.*, 1934, 6, 97-111.—A study of the writing of Napoleon and Josephine, limited to their basic drives and disregarding their higher mental qualities. Indications of a thirst for power as shown in Napoleon's signature include: the second leg of the initial "N" begins higher and ends higher than the first; greater pressure on last letters, which also require more room (where ego-sphere of first part enters the sphere of the non-ego and has to assert itself more strongly); underline in shape of Chinese sword. The illegibility of his writing shows that he found it unnecessary to explain himself to others. Throughout, it shows him a victim of his fundamental drives, which forced him in certain directions without allowing his personality to develop gradually. There is a definite similarity between his writing and that of his mother, with whose personality Napoleon's had much in common. Josephine's handwriting betrays her laziness, light-hearted pleasure seeking, and sensual nature. Disconnected letters show her easy-going attitude, difference in slant of letters her rapidly changing moods, while her smooth movements indicate strong eroticism and the sudden and frequent blurs hold a promise of easy and complete surrender to a victorious lover. These characteristics explain the hold she had on Napoleon: the man who had to struggle against gigantic odds in his political life could not squander his energy on a love object which was difficult of attainment. In quality and quantity of his basic drives, Napoleon's personality was below the social level as much as it was above that level by virtue of his creative ability and intelligence. These drives caused his success as well as his downfall, a fact of which Napoleon was well aware.—*H. Beaumont* (Kentucky).

1942. Roheim, G. *The evolution of culture. Int. J. Psychoanal.*, 1934, 15, 387-418.—Mankind's belief in a Golden Age suggests a phylogenetic significance of this ontogenetic truth, emphasized by the universal

human tendencies found in all customs and myths. Racial differences lie in the super-ego and are best studied by comparison of group ideals. Daua natives show a general trend toward regression from the genital to the pre-genital position. In Central Australia ego-syntonic activities are based on phallic, oral, and aggressive tendencies. In Samoa, identification is the basis of society. Yuma Indians have a personality and culture based on repression of infantile emotions. All forms of behavior have sometimes become exalted into group behavior, hence differentiation between neurotic and civilized behavior is difficult. The structure of the super-ego among primitives suggests that becoming civilized is identical with extension and intensification of the scope of the super-ego and that the prolongation of infancy in civilization increases the number of traumata elaborated into the super-ego. Psychoanalysis has shown that the infantile situation elicits various fantasy systems and mechanisms which suggest a similar process in culture development. Hence various culture systems may be regarded as attempts to deal with infantile anxieties.—*M. H. Erickson* (Eloise Hospital).

1943. Saint-Paul, G. *La religion de l'intelligence et la morale scientifique.* (The religion of intelligence and scientific ethics.) Paris: Vigot, 1934. 15 fr.—*M. H. Piéron* (Sorbonne).

1944. Schilder, P. *Das Körperfeld und die Soziopsychologie. I.* (The image of the body and social psychology. I.) *Imago, Lpz.*, 1933, 19, 367-376.—In dealing with the relations between minds social psychology has neglected the body. In this connection, however, the body is quite as important psychologically as the mind. Instincts and impulses augment organic sensation in producing one's image of one's own body. This image may enter into relations with the image of another's body. Many fixations of interest upon the body and parts of it, long the concern of psychoanalysis, are basically social as well as individual. In certain respects, for instance, auto-eroticism is a social phenomenon. Many processes of identification occur by way of the image of the body.—*H. D. Spoerl* (St. Johnsbury, Vt.)

1945. Schönfeld, W. *De geneeskunde en de graphologie.* (Medicine and graphology.) *Tijdsch. wetensch. Graphol.*, 1934, 6, 112-117.—On the basis of a number of recent publications, discussing the prognostic value of graphology, it is suggested that physician and graphologist may best cooperate if the latter restrict himself to studying character by means of the analysis of handwriting. In this manner valuable hints may be given the psychiatrist regarding personality structure and changes in character. Even though organic diseases cannot be diagnosed by handwriting analysis, it will show the effects of physical disturbances of organic origin. Statistically reliable studies using normal groups as controls should be made by physicians and graphologists together.—*H. Beaumont* (Kentucky).

1946. Schrijver, J. *Ziekte en schrift. II.* (Disease and handwriting. II.) *Tijdsch. wetensch.*

*Graphol.*, 1934, 6, 120-127.—Several investigators have found evidence of a relationship between handwriting showing a difference in slant between upper and lower loops of long letters ("f") or a lack of parallelism between the lower loops of different letters ("g," "j," "y"), and the functioning of the writer's endocrine system. This phenomenon seems to occur from the age of 6 on, to reach its greatest frequency at 13½, and to disappear after 14, and has been suggested as a test of the onset of puberty. It has also been noted in individuals whose endocrine glands functioned abnormally in later life (including cases of psychic and sexual infantilism) and in those whose climacteric brought about glandular malfunctioning. The relationship is probably such that physiological disturbances in critical times of life express themselves in nervousness and irritability. Graphologically, this is shown in the above irregularity. After sufficient data have been gathered to secure reliability, this phenomenon might well gain significance as a means of characterological and medical diagnosis.—*H. Beaumont* (Kentucky).

1947. Scripture, E. W. *Film tracks of English vowels*. *J. acoust. Soc. Amer.*, 1935, 6, 169-172.—The method of analyzing speech records previously used by the author is applied to the film tracks of several vowels.—*S. S. Stevens* (Harvard).

1948. Scuri, D. *Rinofonia e rinolalia*. (Rhinophonia and rhinolalia.) *Valsalva*, 1934, 10, 816-840.—The author examines the different dysphonic and dysartic phenomena with particular reference to respiration.—*R. Calabresi* (Rome).

1949. Smythe, J. *El problema del menor en estado de peligro. Continuación*. (The problem of the minor in a neglected state. Continuation.) *Rev. Criminol., B. Aires*, 1934, 21, 511-548.—The organic constitution of the minor is not itself sufficient cause for the realization of antisocial behavior. Psychopathological factors are important. It is estimated that in 70% of minor delinquents some organic abnormality is present. Four well delimited types of assistance are recommended: palliative, preventive, curative, and constructive. The last, which implies social service, is the ultimate step in the eradication of delinquency.—*R. M. Bellows* (Ohio State).

1950. Tinker, M. A. *Illumination and the hygiene of reading*. *J. educ. Psychol.*, 1934, 25, 669-680.—The paper is a summary of representative literature on the problem. The three aspects of illumination considered are intensity, wave length, and distribution of light. For discrimination of rather fine detail a minimal intensity of eight to ten foot-candles is essential. If distribution is adequate, ordinary reading may be done under from two to forty foot-candles. Sunlight is a more effective illuminant than any monochromatic light. "Of the monochromatic or colored lights, yellow is best and blue is poorest for fine discrimination." Distribution is the most fundamental aspect of hygienic illumination. It is the most adequate "when the evenness of illumination, the evenness of brightness at the working surface, and the diffusion of the light are at a maximum." A

considerable number of other conclusions is cited. There is a bibliography of 27 titles.—*J. A. McGeoch* (Missouri).

1951. Tinker, M. A. *The reliability and validity of eye-movement measures of reading*. *Psychol. Bull.*, 1934, 31, 741.—*J. F. Dashiell* (North Carolina).

1952. Trent, S. *Women over forty*. New York: Macaulay, 1934. Pp. 189. \$2.00.—(Not seen).

1953. Wilke, —. *Zuhilferei und ihre Bekämpfung*. (Procuring and its control.) *Krim. Mh.*, 1934, 8, 274-276.—Both procuring and prostitution have undoubtedly increased in recent years due to the economic situation, and this latter makes their control extraordinarily difficult. In the revolutionary and succeeding periods procurers were openly and brazenly organized and engaged also in plundering, robbery and murder; but the Third Reich has at least driven them under cover. Procurers will not work, and yet they demand unemployment relief. Although the penal code includes them among the habitual criminals, it is practically impossible to convict them. Only severe measures will make any impression on these degenerates. As procuring and prostitution always go together, a real "limitation" of the latter must be sought. Prostitution deserves the most earnest consideration on grounds of racial purity.—*M. E. Morse* (Baltimore).

[See also abstracts 1597, 1684, 1794, 1799, 1809, 1826, 1834, 1849, 1863, 1864, 1866, 1886, 1958, 1968, 1981, 1984, 1991.]

#### INDUSTRIAL AND PERSONNEL PROBLEMS

1954. Busse, H. *Bekämpfung der Arbeitsermüdung bei Bandmontage*. (Control of fatigue at a moving belt assembly.) Leipzig: Barth, 1933. Pp. 26. RM. 2.00.—A study of fatigue in assembling electrical appliances on a moving belt. The chief methods for reducing fatigue were an analysis and improvement of the individual tasks and the introduction of sound signals for the movements of the belt.—*K. F. Muenzinger* (Colorado).

1955. Fryklund, V. C. *When is a skilled mechanic? A study in nomenclature and classification*. *Occupations*, 1935, 13, 403-412.—The author finds wide variations of usage with regard to such terms as "skilled" and "semi-skilled," "operatives" and "mechanics." Accordingly he recommends "that the term *semi-skilled* should be a standardized term applied to factory operatives or repetitive workers, and that the term *skilled* should be applied to all-round craftsmen or mechanics" and that "the term *unskilled workers* should be applied to common laborers such as sweepers and car-loaders." These definitions are illustrated with a sampling of types of workers found in Minneapolis metal manufacturing plants.—*R. H. Brown* (Clark).

1956. Gemelli, A. *Funzione e necessità della psicotecnica*. (The functions and necessity of psychotechnics.) *Polit. soc.*, 1933. Pp. 8.—*R. Calabresi* (Rome).

1957. Heise, H. A. **Alcohol and automobile accidents.** *J. Amer. med. Ass.*, 1934, 103, 739-741.—Among the drivers involved in 119 consecutive automobile accidents 74 were under the influence of alcohol. Its presence was demonstrated by chemical test of the body fluids. Only one of this alcohol group was a female. Two series of experiments were undertaken to determine the effects of small amounts of alcohol. In the first study the subjects (number and sex not mentioned) were given 30 c.c. of whisky. All the subjects showed a loss in typewriting efficiency, although there tended to be a gain in speed. In the second series of experiments the subjects were given 150 c.c. of whisky and then tested under actual driving conditions. All subjects were able to pass creditably the ordinary tests used to determine drunkenness and were able to perform adequately in so far as the routine requirements of driving were concerned. They were below normal efficiency in avoiding obstacles, backing the car, use of the hand brake, and other non-habitual reactions. All subjects showed some disorientation and either a depression or an exhilaration. Reaction times (application of brakes after a signal) were increased. Since ordinary methods for determining drunkenness are inadequate the chemical evaluation of the amount of alcohol in the body fluids is recommended.—D. J. Ingle (Mayo Foundation).

1958. Lahy, B. **Essai d'application des tests musicaux de Seashore à la sélection des radio-télégraphistes.** (Application of the Seashore musical tests in the selection of radio telegraphers.) *Bull. Inst. nat. Orient. prof.*, 1934, 6, 201-208.—The tests as applied to French subjects gave results very comparable to those secured by Seashore. The test does not seem adapted to the selection of radio telegraphers.—M. H. Piéron (Sorbonne).

1959. Mata, L. **Selección psicotécnica para agentes de policía.** (Psychotechnical selection of police officers.) Buenos Aires: 1934. Pp. 19.—The material of this monograph has appeared as two articles elsewhere (see IX: 1375, 1960) and these have been abstracted separately.—R. M. Bellows (Ohio State).

1960. Mata, L. **Selección psicotécnica de agentes de policía. Conclusion.** (Psychotechnical selection of police officers. Conclusion.) *Arch. argent. Psicol. norm. patol.*, 1933-1934, 1, 65-66.—Objective measures of emotional stability are necessary adjuncts to a battery of tests devised for selection of police officers. An index of imperturbability is obtained by measuring physiological changes which accompany emotions. The normal physiological rhythms are found, the index being determined (1) by the degree of fluctuation of rhythms from the normal during emotion, and (2) by the criterion of the time required for returning to the normal rhythms after the emotional upset.—R. M. Bellows (Ohio State).

1961. Piéron, H. (Mme.) **Essais en vue de l'établissement d'une fiche d'aptitude technique.** (Attempts to establish a scale of technical aptitude.) *Bull. Inst. nat. Orient. prof.*, 1933, 5, 61-69.—The article gives a standardization on French students of the hole test of Friedrich.—M. H. Piéron (Sorbonne).

1962. Piéron, H. (Mme.) **Instructions pour l'emploi de la Fiche d'Aptitude Technique.** (Instructions for the use of the Technical Aptitude Scale.) *Bull. Inst. nat. Orient. prof.*, 1934, 6, 137-157; 165-176.—Complete instructions, notations, and standardization of a scale for technical aptitude composed of 20 tests which have been given to 1461 subjects of approximately 12-20 years of age.—M. H. Piéron (Sorbonne).

1963. Ponthière, M. **Choisir un métier.** (Choosing a trade.) *Organisation*, 1934, 147-151.—Information is given on vocational selection and guidance in France. The author recommends obligatory professional orientation.—M. H. Piéron (Sorbonne).

1964. Roethlisberger, F. J., & Dickson, W. J. **Studies in industrial research: technical vs. social organization in an industrial plant.** Cambridge: Harvard Univ., Graduate School of Business Administration, George F. Baker Foundation, 1934. Pp. 36.—Studies of small working groups were made at the Hawthorne plant of the Western Electric Company. Particular attention was paid to the social interrelations in each group of workers to determine how closely this corresponded to the technical scheme. Workers on the same level often exercised strong influence upon each other. One may be the socially recognized leader of the group; another, a social outcast because of lack of strict conformity with the group mores. It is shown that this social organization often defeats any wage incentive system planned by the administration. Even in group piece work, in which expert production by one individual would increase the pay envelopes of his co-workers, the members of the group very often apply pressure to keep him from exceeding a limit arbitrarily set by themselves. Since the worker cannot himself initiate changes and finds it difficult to adapt to innovations, he blindly struggles to maintain the status quo. This is accomplished by an informal social organization among the workers. Technical organization plans have assumed the worker to be motivated by economic interests alone, and have disregarded social interrelations. The success of management is found to be in its ability to introduce more efficient methods without disrupting the social foundations.—H. J. P. Schubert (Transient Center, Buffalo).

1965. Schreider, E. **Facteurs physiologiques et psychologiques de la prédisposition aux accidents.** (Physiological and psychological factors in the predisposition to accidents.) Paris: Conserv. Arts & Métiers, 1934. Pp. 61.—A general historical survey of the various aspects of the problem indicates that at present the causes of accidents may be discovered with sufficient probability to render the undertaking practicable. From among the tests already used in industry and from the intelligence tests, the author selects for emphasis the following: reaction time; attention; precision of pointing; emotivity; and the facility of readaptation and inhibition.—M. H. Piéron (Sorbonne).

1966. Vilbois, J. **L'organisation et l'entreprise. Le facteur humain.** (Organization and enterprise. The human factor.) *Organisation*, 1933, 24, 293-295.

—A psychological study of the various qualities demanded by the application of Fayolism and Taylorism.—*M. H. Piéron* (Sorbonne).

[See also abstracts 1546, 1851, 1893, 2017.]

### EDUCATIONAL PSYCHOLOGY

1967. [Anon.] **Sex education: facts and attitudes.** New York: Child Study Ass. Amer., 1934. Pp. 60. \$25.—A collection of articles with wide age range and varied approach, which have appeared previously in current magazines.—*R. H. Brown* (Clark).

1968. [Anon.] **Integrity-measure.** *Eugen. News*, 1934, 19, 102-104.—The article is largely a review of *The Kept Student*, by Henrietta Ripperger (*Atlantic Monthly*, April, 1934) in which was discussed an attempt to measure the integrity of student borrowers from a philanthropic foundation. Negro students were found low on the list. German exchange students headed the list of prompt payments. Among the Jews, good family background favored integrity, but in other instances they tended to evade collection. The average "American" undergraduate exhibited very little deliberate dishonesty. The author found no sex difference in reliability. Among occupational groups, engineers proved to be the best and ministers the poorest pay. The review includes a suggestion to psychologists concerning the need of exactly defining this quality of integrity, of separating the hereditary and environmental components, and of developing an integrity measure more precise than this one of the "category" type.—*M. V. Louden* (Pittsburgh).

1969. [Anon.] **One hundred books: a library on occupational adjustment.** *Occupations*, 1935, 13, 417-421.—*R. H. Brown* (Clark).

1970. **Bair, F. H. The social understandings of the superintendent of schools.** *Teach. Coll. Contrib. Educ.*, 1934, No. 625. Pp. v + 193.—A 12-page questionnaire (sent out in February, 1931) was returned by 850 superintendents (21%) and the Harper questionnaire by 648. Public schools should deal with important contemporary social problems, superintendents say (98%), although they do not now do so (74%). The greatest pressure against enlightenment came from religious sources, next commercial. A summary of the social views of the superintendent and a personal portrait of him are given. 75% of those answering the items state that they belong to a church; 68% are active in church work; 54% teach or have taught Sunday school. Appendices and tables in the text give the basic data from the questionnaire. The data are divided according to geographic location; superintendents from the south are the most conservative; those from the west the most liberal.—*J. M. Stalnaker* (Chicago).

1971. **Brockmann, L. O. Guidance through doing: tryout experiences for high school students.** *Occupations*, 1935, 13, 413-416.—The author describes a guidance program in operation for four years in Lewistown, Montana. Juniors and seniors in high school receive part-time employment in some store, shop, or office, in accordance with their choice and

take a course designed to provide a general background in economics, industrial history, sociology, and current problems. Reports by employers and conferences between parents, students, and counselor complete the program, which has been found highly advantageous.—*R. H. Brown* (Clark).

1972. **Calò, G. Pro e contro il cinematografo nella scuola.** (For and against the cinema in the school.) *Vita scol.*, 1934, 5, No. 1.—*R. Calabresi* (Rome).

1973. **Campbell, D. W. Can world-mindedness be influenced by incidental teaching?** *J. Geog.*, 1934, 33, 266-271.—The purpose of this study was to determine whether or not high-school pupils could be influenced to become more international-minded by incidental teaching in economic geography. The degree of world-mindedness was determined by administering the Neumann-Kulp-Davidson Test of International Attitudes to 150 pupils comprising four classes in economic geography. After eighteen weeks of teaching directed toward increased respect for the Germans, increased opposition to war, and an increased preference toward the Chinese, the same test was readministered. It was found in general that high-school pupils can be influenced to become more international-minded by incidental teaching in economic geography, and that evidence of this influence may be observed within a semester's time.—*R. Smith* (Clark).

1974. **Carlson, H. S. A technique for measuring classroom morale.** *Psychol. Bull.*, 1934, 31, 724-725.—Abstract.—*J. F. Dashiell* (North Carolina).

1975. **Chen, L. K. Recent developments in educational psychology.** *Educ. Rev. (Chinese)*, 1934, 24, No. 3, 29-37.—As a result of its own effort as well as the help derived from genetics, neurology, general psychology and child psychology, educational psychology has in recent years made striking advances. This paper limits itself to a brief review of the following points, viz., (1) the present status of the conflicting theories of learning (i.e., connectionism, the principle of conditioning, and learning by insight); (2) the growing weakness of the Thorndikian laws of learning (i.e., the laws of exercise, effect, and readiness); (3) psychological studies of school subjects; (4) studies of unusual children, both gifted and subnormal; and (5) investigations into the psychology of adult learning.—*C.-F. Wu* (Nat. Res. Inst. Psychol., Shanghai).

1976. **Class, E. C. The effect of the kind of test announcement on students' preparation.** *J. educ. Res.*, 1935, 28, 358-361.—Effects of announcing an essay type of test or an objective type of test or merely announcing that a test will be given but without announcement of the type were studied on 85 students from the point of view of their preparation. The author finds that the objective test has brought about a different type of preparation, tending to more specific attention to details.—*S. W. Fernberger* (Pennsylvania).

1977. **Cooper, I. M. A comparative study of the organization for teaching of ten beginning reading**

systems. *J. educ. Res.*, 1935, 28, 347-357.—Analysis of 10 reading systems from the points of view of the underlying philosophies, objectives, accessory materials, size of vocabularies, repetition of words, phonics, and remedial measures.—S. W. Fernberger (Pennsylvania).

1978. Darányi, J. *Az iskolás kor egészségügye*. (Hygiene of school age.) Budapest: 1933. Pp. 618.—Mental hygiene: Part I. Darányi, J., General school hygiene: the care of school children, 6-9. Didactic hygiene, 9-13. Post-school hygiene, 17-18. III. Melly, J., Structure of our sanitary administration, 1-12. IV. Gortvay, G., Direction of social care, of school children, 1-3. VII. Jankovich, A., The role of school physicians in vocational guidance, 7-9. IX. Makvalvi, M., Examination of school children, 1-17. XXI. Temesváry, G., The importance of sexual pedagogy from the standpoint of school physicians, 15-23. XXVI. Ranschburg, P., Psychoneurology of the school age, 1-39. XXVII. Bárczy, G., Speech deficiency and speech disturbances, 1-8. XXVIII. Imre, A., Pedagogic standpoints in school medical work, 1-39.—P. Ranschburg (Budapest).

1979. Dean, L. E. Experiments in the academic education of adolescent deaf pupils. *Amer. Ann. Deaf*, 1934, 79, 292-305.—Special education of a 15-year-old deaf girl with a hearing loss of 75% was carried out for one school year under the direction of R. H. Gault. Descriptions of methods, materials, and results of an experimental program of reading, arithmetic, social science, written language, and applied art are briefly presented.—C. V. Hudgins (Clarke School).

1980. Domokos-L., E. *A tevékeny tanulók és osztályuk jellemző vonásai*. (Characteristic features of active pupils and their classes.) *Gyermek*, 1933, 25, 72-79.—Experiences, observations and experiments on the pupils of the "Ujiskola" (New School), founded by the authoress in 1914 according to the teachings of L. Nagy. The creative energy of the child is called forth only by the self-chosen aim of working (*Arbeitsziel*) of the child. There are to be found children of the (1) improductive-mechanical, (2) reproductive-descriptive, (3) subjective-reporting, and (4) creative types.—P. Ranschburg (Budapest).

1981. Ferreri, G. *L'edizione americana del metodo belga. Problemi sull'educazione dei sordomuti*. (The American edition of the Belgian method. Problems in the education of deaf mutes.) Siena: Scuola Tip. Sordomuti, 1934. Pp. 25.—R. Calabresi (Rome).

1982. Jeudon, R. *L'éducation du geste*. (The education of bodily movement.) Paris: 1934. Pp. 122.—The author points out the role of sport and physical education in pedagogy. The results of the education of bodily movement upon physical and mental behavior are discussed.—M. H. Piéron (Sorbonne).

1983. Just, G. *Zum Problem: Schulleistung und Lebensleistung*. (Concerning the problem of academic and professional achievement.) *Z. angew.*

*Psychol.*, 1934, 47, 161-172.—The author points out that very little work has been done so far on the problem of the relation between academic and professional achievement. His remarks serve as an introduction to the study by Lottmann (see IX: 1987) which he directed.—K. F. Muenzinger (Colorado).

1984. Lane, H. A., & Witty, P. A. *The educational attainment of delinquent boys*. *J. educ. Psychol.*, 1934, 25, 695-702.—The writers describe and analyze the educational attainment of about 650 boys in the St. Charles, Illinois, School for Boys (an institution for young delinquents). "Although mental retardation characterized the group, it was much less noticeable and grave than was retardation in educational growth (as measured by the Stanford Achievement Test)." Nevertheless, "these boys demonstrated the capacity to profit by the instruction which was planned in accord with their mental and educational status." It may be assumed that improved educational opportunity "may ameliorate somewhat the conditions that foster maladjustment and contribute to delinquent behavior."—J. A. McGeoch (Missouri).

1985. Laugier, H., Piéron, H., Piéron, H. (Mme.), Toulouse, E., & Weinberg, D. *Etudes docimologiques sur le perfectionnement des examens et concours*. (Docimological studies on the perfecting of examinations and competitions.) Paris: Conserv. Nat. Arts et Metiers, 1934. Pp. 90. 15 fr.—A collection of 7 studies with an introduction by Piéron and Laugier. (1) An article by Piéron, Mme. Piéron, and Laugier giving a critical study of the selective value of the "certificate of studies" and a comparison of this examination with one by means of tests. (2) Laugier and Weinberg write on the subjective factor in examination notes. (3) and (4) Piéron writes on the technique of examinations and the necessity for a docimology. (5) An account by Piéron of the new education and docimology. (6) Laugier, Toulouse, and Weinberg discuss biotypology and scholastic classification. And (7) Laugier and Weinberg make a comparative study of the examination marks of male and female students of the sciences. These articles, all published elsewhere, seek to demonstrate the possibility of undertaking the study of the examination by objective and experimental methods.—M. H. Piéron (Sorbonne).

1986. Lombardo-Radice, G. *Il problema dell'educazione infantile*. (The problem of infant education.) Florence: Nuova Italia, 1933. Pp. 236. 14 L.—R. Calabresi (Rome).

1987. Lottmann, W. *Schulleistung und Lebensleistung ehemaliger Gymnasialabiturienten*. (School achievement and life achievement of former high-school graduates.) *Z. angew. Psychol.*, 1934, 47, 173-299.—This investigation is based on the scholastic and professional records of 927 boys who graduated from two German high-schools (*Gymnasien*) during the years 1885 to 1914. The scholastic achievement was evaluated from grades, the judgments of teachers, and the answers from a questionnaire sent to the sub-

jects of the study. The results show that certain professions tend to be filled by people of a certain level of achievement. Among the professions served by students of the highest levels are judges, college teachers, Catholic priests, and editors; among those served by students of the middle level are lawyers, artists, and physicians; and among those served by students of the lowest levels are lower state and city officials and Protestant ministers. The failures in life belonged in school to the very lowest level. The final section of the study is concerned with the problem of selecting and classifying students in high school.—*K. F. Muensinger* (Colorado).

1988. Meek, L. H. *The relation of family and school life in the education of children.* *Teach. Coll. Rec.*, 1935, 36, 271-278.—A discussion of the relation of the school to the home in health and character education and education for leisure. Conscious interaction and interrelation between school and home is advocated.—*J. M. Stalnaker* (Chicago).

1989. Meyer, G. *An experimental study of the old and new types of examination: I. The effect of the examination set on memory.* *J. educ. Psychol.*, 1934, 25, 641-661.—The learning material consisted of two mimeographed chapters from a volume on the Civil War. The subjects were instructed (set) to study for a particular kind of examination, true-false, completion, multiple-choice or essay. For recognition tests of immediate memory, set is of slight importance, while for recognition tests of delayed memory or for recall tests of immediate or delayed memory, recall sets are superior to recognition sets. For recall of isolated facts where specific cues are given, the completion type of recall examination set is superior throughout. For the recall of facts without specific cues and for recall in organized fashion the essay set is superior. Forgetting, as measured by recognition, is faster for learning with recognition sets than for learning with recall sets. Forgetting, as measured by recall, is about the same with either set.—*J. A. McGeoch* (Missouri).

1990. Mouriquand, —, Pehu, —, Bertoye, P., Bartier, J., Vignard, P., Mazel, P., D'Espiney, P., Mouchanin, —, & Charmot, R. P. *Médecine et éducation.* (Medicine and education.) Lyon: Lavandier, 1934. Pp. 236. 12 fr.—The following topics are discussed: The chief stages of child development (Mouriquand); the first psychic activity of the child (Bertoye); conditioned reflexes and their role in education (Bartier); the insufficiency of the pupil's physical development and physical culture (Vignard); the nervous child (Pehu); the medical aspect of the problem of sex education (D'Espiney); children with antisocial reactions (Mazel); and health, wisdom and saintliness (Abbé Mouchanin).—*M. H. Piéron* (Sorbonne).

1991. Pintner, R., Maller, J. B., Forlano, G., & Axelrod, H. *The measurement of pupil adjustment.* *J. educ. Res.*, 1935, 28, 334-346.—One of the functions of the modern school is satisfactorily to adjust the pupils to their social environment. In order to measure the adequacy of this adjustment, the authors have

developed a test. On the basis of four criteria, 287 statements were prepared for the experimental edition of the test, which was administered to 544 elementary-school pupils in Grades 4-8 in three types of school. There were two parts to each of 5 sub-tests, one relating to attitude and the other to behavior. The sub-tests had to do with school, teacher, classmate, self and family attitude and behavior. From a statistical study the 200 items showing the greatest reliability were chosen for the final form of the test, and this was given to 114 pupils in Grades 6A and 6B in a public school. Tentative norms have now been obtained for two forms on the basis of 756 pupils on Form A and 423 on Form B. Both forms are given in entirety in the text.—*S. W. Fernberger* (Pennsylvania).

1992. Ranschburg, P. *Az iskolásokor psychoneurologia.* (Psychoneurology of the school age.) In Darányi, J. *Az Iskolásokor Egészségügye.* Pp. 1-39.—I. Evolution of the mind in childhood. 1. Reflexologic and psychologic examination of normal and abnormal children. 2. The course of mental evolution in normal and abnormal children. II. The somatic connections of normal and pathologic intellectual, affective and instinctive phenomena. 1. Groups of abilities. 2. Heredity. 3. Internal secretion: hormones and constitutional types. III. Psychoneurology of normal and pathological attention. 1. The quantitative law of attention. Behavior of psychic fatigue. 2. Disturbances of attention. a. Chiefly somatic causes. b. Chiefly psychical causes. IV. Psychoneurology of learning. A. Hygiene and pathology of learning. Role of the pedagogue, of the pupil and of the environment in learning. B. Factors of learning. 1. Perception and understanding. Types of perception and learning. 2. Sensory and intellectual, partial and global understanding. 3. Directive and controlling ideas. 4. Summative exercises—recall, recollection, reproduction. C. Hygiene, economy and technique of learning. Mechanical and attentive repetition. Distribution of repetitions. Uncertainty of the pupil about his degree of knowledge of the learned material. Importance of repeatedly controlling our reproductions between the repetitions. 2. Role of the quality of the matter to be learned. 3. Importance of teaching both teachers and pupils how to learn. 4. Learning difficulties with retarded but still normal pupils. V. Hygiene and economy of the free time of the pupil. 1. Limitations of time. 2. Difficulties of reproduction with neuropathic children. 3. Role of anxiety and fear. 4. Inhibitions as habits. 5. Importance of right distribution of free time and of teaching the pupils to make wise use of their time. 6. Sundays and holidays. Six working-days are equal to only 144 hours, from which deductions must be made for meals, sleeping, dressing, bathing, going to and from school, etc. Total of free hours in low and middle schools. Suitable arrangement of home-work with the pupil, supported by the teacher, as an elementary condition of useful, quiet and wholesome accomplishment in school work, self-training, recreation, diversion and sports. VI. Sequence of matters of instruction according to their subjective difficulty and popularity.

Popularity and vocation. VII. The problem of school classification and the school physician. VIII. The problem of class examinations and maturity examination with normal and neuropathic children. The specially gifted child. IX. Neuro- and psychopathic pupils. What is to be accepted of the psychoanalytical teachings of Freud and Adler? X. The sexual problem and the question of sexual enlightenment in childhood. XI. Is masturbation a hygienic-biologic function? The teaching of Stekel to the mothers. XII. Schooling of nervous and neurasthenic (psychasthenic) children. XIII. The retarded, subnormal and feeble-minded child and his schooling. Medical methods of treatment. XIV. Morally oligophrenic children and their treatment.—P. Ranschburg (Budapest).

1993. Rémy, M. *Nouveaux tests d'instruction*. (New educational tests.) *Bull. Soc. A. Binet*, 1934, No. 296, 66-67.—The tests are for use in the division of classes at the beginning of the academic year. They include tests of spelling, opposites, calculation, and geometry.—M. H. Piéron (Sorbonne).

1994. Stogdill, E. L. *A survey of the case records of a student psychological consultation service over a ten-year period*. *Psychol. Bull.*, 1934, 31, 736.—Abstract.—J. F. Dashiell (North Carolina).

1995. Thorndike, E. L. *The Thorndike-Century junior dictionary*. Chicago: Scott, Foresman, 1935. Pp. x + 970. \$1.32.—The vocabulary has about 25,000 entries, each defined in terms of more frequent words. There are about 1800 simple pictures. The type and format are in accordance with the results of latest researches in reading hygiene. There are prefaces to teacher and pupil, directions on the use of the dictionary, and pronunciation and composition keys.—R. R. Willoughby (Clark).

1996. Tóth, Z. *Általános gyógypedagogia. I. A gyágypedagogia fogalma*. (General corrective pedagogy. I. The conception of corrective pedagogy.) Budapest: 1933.—I-V. Introduction: The importance of the conception of education, by J. Korniss. 3-12. Preface. 13-288. The concept of corrective pedagogy, system and interpretation of its disciplines; its problems. Literature.—P. Ranschburg (Budapest).

1997. Vauquelin, R. *Les aptitudes fonctionnelles et l'éducation*. (Functional aptitudes and education.) Paris: Alcan, 1934. Pp. 307. 35 fr.—In the first part, the author presents the least frequently discussed results bearing on psychological heredity. The origin of functional aptitudes is discussed, and the respective roles of racial, sexual, and familial heredity in the innate psychological constitution of the child are shown. The second part of the book defines the principal psychological elements and the functional aptitudes and their variations. The third part contains an examination of modifications of functional aptitudes produced by education, and the variations in sexual, racial, and twin differences according as they are subjected to the same or different educational conditions. A bibliography of more than 200 titles is given.—M. H. Piéron (Sorbonne).

1998. Vauquelin, R. *Les origines de la psychologie pédagogique. De Rousseau à Kant*. (The origins of

pedagogical psychology. From Rousseau to Kant.) Paris: Alcan, 1934. Pp. 195. 20 fr.—The book contains 3 chapters, the first dealing with the pedagogical psychology of Rousseau and his predecessors. The author grants that Rousseau found interesting pedagogical ideas among his predecessors, none of whom, however, had known how to develop pedagogical precepts from a knowledge of child psychology. Rousseau knew how to connect all of his knowledge to a directive principle. The second chapter shows the originality of Rousseau, the origins of his pedagogical psychology, and his relation to philosophy. The author shows how the study of the functional conception of childhood, the observation of child faculties and aptitudes made Rousseau the founder of pedagogical psychology. The third chapter discusses Rousseau's successors to the time of Kant. It is here evident that Rousseau appeared too soon and that he was not understood. Science at that time did not possess the methods necessary to verify and put at work such conceptions as that of the functional role of the child.—M. H. Piéron (Sorbonne).

1999. Wagner, M. E. *Homogeneous grouping as a method of improving prediction coefficients*. *Psychol. Bull.*, 1934, 31, 736-737.—Abstract.—J. F. Dashiell (North Carolina).

2000. Wagner, M. E., & Strabel, E. *Improving the vocabulary and longhand reading ability of students in classes in stenography*. *Bus. Educ. World*, 1934, 15, 225-226.—The description of an experiment the purpose of which is to determine the effects of improvement of vocabulary and of ability to read printed longhand upon the reading and writing of shorthand. The experimental set-up and content of the special training periods are described. The results are promised for a future number.—H. J. P. Schubert (Transient Center, Buffalo).

2001. Wei, C. *An analysis of educational objectives*. *Educ. Rev.* (Chinese), 1934, 24, No. 2, 67-77.—The author suggests the following as our educational objectives, viz., healthful, economic, vocational, linguistic, mental, domestic, civic, moral, scientific, and artistic efficiencies. He then discusses the methods of analyzing these objectives, as well as the ways and criteria of selecting the data thus obtained. The major items in each of the 10 educational objectives are listed.—C.-F. Wu (Nat. Res. Inst. Psychol., Shanghai).

2002. Wheeler, R. H. *A set of postulates for educational theory. I. The background*. *J. educ. Res.*, 1935, 28, 321-333.—The author insists that all science is based on either of two sets of assumptions, one of which is primarily teleological and the other primarily mechanistic. Science has recently tended away from the mechanistic back toward the teleological type of basic explanation. Education had its scientific inception during the sway of the mechanistic concept, however. The author believes that most advances of scientific thought have come under the guidance of the teleological basic plan and, if this be true, then education needs "housecleaning" because of its mechanistic approach.—S. W. Fernberger (Pennsylvania).

2003. Witty, P. A. The relative frequency of gifted boys and girls in the secondary school. *Educ. Adm. Supervis.*, 1934, 606-612.—"The present study aimed chiefly to ascertain the validity of the statement that the ratio of gifted boys to gifted girls is two to one in the high school. The results (from 27,642 boys and girls in grades 9 to 12 inclusive) do not support this statement, nor the hypothesis emphasizing disproportionate male variability at the high intelligence levels."—R. H. Brown (Clark).

2004. Young, C. W., & Estabrooks, G. H. Non-intellectual factors related to scholastic achievement. *Psychol. Bull.*, 1934, 31, 735-736.—Abstract.—J. F. Dashiell (North Carolina).

2005. Zambaldi, I. La scuola attiva e il metodo d'insegnamento. Il disegno. (The active school and the method of teaching. Design.) *Riv. pedag.*, 1934, 27. Pp. 64.—This is the last of a series of studies by the same author dealing, according to the principles of the active school, with the teaching methods for all subjects in the primary schools. The first part of the article is psychological. It examines child drawing from its first appearance up to ideographic expression, and it considers the parallelism between perfection of drawing and the development of language and intelligence. Drawing, which at first is play to the child, reveals an attempt to copy reality when the child reaches 7-8 years. The second part of the article concerns the teaching of drawing.—R. Calabresi (Rome).

[See also abstracts 1611, 1785, 1900, 1924, 2006.]

#### BIOMETRY AND STATISTICS

2006. Handy, U., & Lentz, T. F. Item value and test reliability. *J. educ. Psychol.*, 1934, 25, 703-708.—"Items of high differentiating value should yield a higher reliability than those of low value. The present experimental verification of this most obvious assumption was not undertaken merely to see if it were true but to obtain some quantitative data concerning the relationship." A knowledge of item values enables one to validate a method of item evaluation and permits an estimation of reliability. "For this estimation we propose a variation of the Spearman-Brown formula based on an empirically determined relation between item value and reliability as described in the present study." These considerations were investigated by means of the Lentz *Social Science Opinionnaire*. Method, formula and data are given.—J. A. McGeoch (Missouri).

2007. Penrose, L. S. A method of separating the relative aetiological effects of birth order and maternal age, with special reference to mongolian imbecility. *Ann. Eugen.*, Camb., 1934, 6, 108-127.—The purpose of this paper is to outline in detail a technique devised by R. A. Fisher and applied by Penrose, so that other workers will be able to apply it to problems where it is necessary to reconstruct part of the data, in cases where the usual methods of analysis are not suitable.—J. W. Dunlap (Fordham).

2008. Shen, E. C. An experimental comparison of the error of sampling of the mean and median: A minor contribution to educational statistics. *Educ. Rev. (Chinese)*, 1934, 24, No. 1, 131-135.—The author first points out that the ratio between the error of sampling of the median and that of the mean is not constant, but varies according to the shape of frequency distribution. He then goes on to demonstrate that (1) the formula of the error of sampling of the median as given in most of the statistical books, viz.,

$$\sigma_{\text{mdn}} = 1.2533 \frac{\sigma_{\text{dis}}}{\sqrt{N}}$$

is applicable only to cases of normal distribution, while the formula  $\sigma_{\text{mdn}} = \frac{i\sqrt{N}}{2f}$  is applicable to all cases; (2) when the frequency distribution is a skewed one, with a high peak and a long slope, the median is more reliable than the mean; and (3) the ratio between the error of sampling of the median and that of the mean serves as a criterion for determining whether the median or the mean should be used. When this ratio is larger than 1, the mean is more reliable; and when this ratio is smaller than 1, the median is more reliable.—C.-F. Wu (Nat. Res. Inst. Psychol., Shanghai).

#### MENTAL TESTS

2009. Darmois, G. Sur la théorie des deux facteurs de Spearman. (Concerning the two-factor theory of Spearman.) *C. R. Acad. Sci., Paris*, 1934, 199, 1177-1178; 1358-1363.—M. H. Piéron (Sorbonne).

2010. Kreutz, M. Comment remédier à l'inconstance des tests. (How to correct the inconstancy of tests.) *Arch. Psychol., Genève*, 1934, 24, 227-244.—The author's experimental studies, published elsewhere, led to the distinction of two groups of factors producing variability of results for the same test when applied to one individual: (1) factors related to the manner of executing the task, which are often unknown to the experimenter, but which are important in that they involve different aptitudes; and (2) modifying factors which, although not necessary for the solution of the task, may alter the results. This latter group includes such factors as unrelated intellectual representations, sentiments, desires, volitional factors, and the physiological condition of the subject. The author rejects the arithmetic mean in treating the problem in favor of the maximum score as characteristic of the individual, inasmuch as this represents the upper limit of the individual's performance under the best conditions. In order to obtain this maximum score, it is necessary to eliminate chance values, those due to forbidden aids, and tests which do not permit an exact control of the subject's method. Three rules for this are given: (1) use thoroughly analyzed tests plus observation of the subject, including his introspections; (2) give the tests under the best physical, physiological, and psychological conditions; and (3) repeat the examination until a maximum is secured which the subject cannot exceed.—M. R. Lambercier (Geneva).

2011. McDougall, W. *On the nature of Spearman's general factor.* *Character & Pers.*, 1935, 3, 127-143.—McDougall holds that Spearman's *g* concept should be revised or extended so as to express the power of concentration of energy rather than the amount of energy in an individual. This modification would harmonize the concept with McDougall's theory of hormic psychology.—*M. O. Wilson* (Oklahoma).

2012. Monnin, J. *Recherches sur l'intelligence. Données sur la parenté de certaines formes d'intelligence.* (Investigations of intelligence. Data on the relationship of certain forms of intelligence.) *Bull. Inst. nat. Orient. prof.*, 1933, 5, 1-8.—A study of comprehension, invention, and criticism by means of tests which involved three modes of presentation for each problem. The investigation shows that tetrad differences may indicate the presence of a general factor and of specific factors to the exclusion of all group factors.—*M. H. Piéron* (Sorbonne).

2013. Schäfer, R. C. *Spearman's theoretisch-psychologisches Werk "The Nature of Intelligence and the Principles of Cognition" in kritischer Beleuchtung.* (C. Spearman's theoretical-psychological work "The Nature of Intelligence and the Principles of Cognition" critically examined.) *Arch. ges. Psychol.*, 1934, 92, 289-314.—The article makes a comparison of the viewpoints of Spearman and Lindworsky in their analysis of intelligence and cognition. Each of the three qualitative and the five quantitative theses of Spearman is critically reviewed and the author's disagreement with them is noted. She holds that Spearman fails to analyze into elements of the cognitive experience, and thus reaches wrong conclusions. She objects to his discrimination between reproduction and correlation and his failure to state whether reproduction is a physiological or a psychical phenomenon. She denies that he has given a comprehensive analysis when he omits phenomena of feeling and will. His empirical approach and the fact that he limits himself to a global rather than to an element-analyzing observation has led him to errors.—*A. B. Herrig* (Michigan Central State Teachers College).

2014. Simon, T. *Nouveaux tests collectifs d'intelligence.* (New group tests of intelligence.) *Bull. Soc. A. Binet*, 1934, No. 298, 90-97.—The author has established two tests intended to duplicate the group P. V. test. They are composed of questions or problems whose answers are not directly dependent upon school instruction. The first test is composed of 21 questions and is applicable to children 7-12 years of age. The second test includes 27 problems for children of 7-13 years.—*M. H. Piéron* (Sorbonne).

2015. Sinoir, G. *Quelques observations sur une application du test de Stenquist.* (Some observations on an application of Stenquist's test.) *Bull. Inst. nat. Orient. prof.*, 1934, 6, 81-92.—The author gives some practical observations on how the test must be given in order to avoid lack of understanding by the subject.—*M. H. Piéron* (Sorbonne).

2016. Tryon, R. C. *Discussion: Interpretation of Professor Spearman's comments.* *Psychol. Rev.*, 1935, 42, 122-125.—A reply to the specific criticisms

which were contained in Spearman's rejoinder to the article in which Tryon discussed the shortcomings of the two-factor theory.—*A. G. Bills* (Chicago).

2017. Weinberg, D. *Les tests de montage d'objets pour la détermination des aptitudes au travail qualifié.* (Tests of putting objects together for the determination of so-called work aptitudes.) *Bull. Inst. nat. Orient. prof.*, 1934, 6, 113-120.—The test is almost identical with that of Stenquist, and it has been standardized for children 13-15 years of age.—*M. H. Piéron* (Sorbonne).

[See also abstract 2006.]

## CHILDHOOD AND ADOLESCENCE

2018. Arlitt, A. H. *The parents' bookshelf.* Chicago: A. L. A., 1934. Pp. 8.—A list of books for study groups compiled for, and issued in cooperation with, the National Congress of Parents and Teachers. The list covers the following topics: child training and child health (the pre-school child and the intermediate child); the adolescent; the family; character education; heredity; sex education; and children's reading.—*R. H. Brown* (Clark).

2019. Bally, G. *Die fröhkindliche Motorik im Vergleich mit der Motorik der Tiere.* (The infant's motor activity compared with that of animals.) *Imago, Lpz.*, 1933, 19, 339-366.—Through comparison with the behavior of other mammals, the motor activity of the infant gives a clue to the development of consciousness. It is characteristic of higher mammals that the period of parental nurture and protection is relatively long. As a result, motor activity that serves basic instincts in other animals is manifested in play. Köhler's observations of chimpanzees illustrate the alternatives. The development of this diverse motor activity fits Freud's schema of the development of consciousness. In the case of the infant the capacity for speech aids the oncoming of the last phase, in which a continuity of the ego is attained. There appear to be anatomical and other biological correlates for the prolonged period of parental protection. The human being continues to resemble the young animal more closely than the adult animal.—*H. D. Spoerl* (St. Johnsbury, Vt.)

2020. Bélaiváry-Burchardt, E. v. *Az írás szerepe a 6-10 éves gyermek életében.* (The role of written expression in the life of children of 6-10 years.) *Gyermek*, 1933, 25, 29-39.—*P. Ranschburg* (Budapest).

2021. Blonski, P. P. *Pedologia.* Moscow: GIZ, 1934. Pp. 334.—An extensive treatment of the psychology and pedagogy of childhood, with a great number of citations from American, German, and French experimental literature. The book is divided into five parts: introduction, early childhood, pre-school period, school period, and adolescence. The chapters in the first part are: historical summary, methods, statistics, and basic concepts. In the second part the divisions are: prenatal development, the neonate, the infant, and the baby. In Part 3 the chapters are: general characteristics of the preschool period, early and later preschool periods. In the

school periods the following topics are treated: general characteristics, development of intellect, analysis of learning, school achievement, mastery of reading, mastery of arithmetic, work and artistic ability, the child in the group. Finally, in the last part are treated the general characteristics of adolescence, special learning problems, and the adolescent in the group. Problems of sex, hygiene, emotionality, and personality maladjustments are given much less space than in similar American texts, but there is greater emphasis on physical and social development.—*G. H. S. Razran* (Columbia).

2022. *Bognár, C. Gyermektipusok.* (Types of children.) *Gyermek*, 1934, 26, 4-10.—The types of adults are to be known from those of children. The most important ones for the psychology of the child are: (1) the instinctive, impulsive, and the inhibitive; (2) the theoretical and the practical; (3) the verbal and the active; (4) the painstaking and the lazy.—*P. Ranschburg* (Budapest).

2023. *Bregman, E. O. An attempt to modify the emotional attitudes of infants by the conditioned response technique.* *Psychol. Bull.*, 1934, 31, 749-750.—*J. F. Dashiell* (North Carolina).

2024. *Conklin, E. S. Principles of adolescent psychology.* New York: Holt, 1935. Pp. ix + 437.—A systematic survey of the problems in the field, in 17 chapters, entitled: introduction, physical maturation and its effects, sex differences, interests of adolescence (2 chapters), ideals, factors in social adjustment (2 chapters), effects of the social conflict (2 chapters), influences of the family (2 chapters), romantic love, religious adjustment, faults and delinquency, special delinquency problems, and abnormalities of personality organization and adjustment. Full documentation is given in footnotes. There is some mention of the history of concepts and investigation concerning the problems discussed. Index.—*R. R. Willoughby* (Clark).

2025. *Cser, J. A figyelem kísérleti vizsgálata a 10-14 éves korban.* (Experimental research on attention in the age range 10-14 years.) *Gyermek*, 1933, 25, 5-7; 99-115; 171-200.—The performance-formula of W. Stern and Deuchler:  $P = \frac{r}{r+f} = \frac{r}{s}$  means the rightness of one individual. From the

correctness of one solution we can calculate the value of all correct solutions by the formula value of performance,  $Pv = r^2/s$ . Attention was measured in the municipal pedagogical-psychological laboratory in Budapest by the method of Emil Révész, applied by L. Nagy and definitively corrected by the author. The pupils were instructed to add during 10 minutes to a given figure (in these experiments always to 105) 1, then 2, then 3; the sum had always to be written on a quarter of a sheet of paper, downwards ( $105+1+2+3+1+2+3$ , etc.), drawing a cross at every tap (given each minute). According to the formula  $Pv = r^2/s$  the results of each minute were calculated. The experiment was made on 710 boys and 789 girls of ages 10-14 years. There is always a relapse in the second minute, and the performance diminishes gradually till the 5th and 6th minutes. The curve of the groups of classes is steeper than that of ages. With 14 years evolution becomes slower, oscillations greater; boys work faster but less accurately than girls. Children of educated parents work better than those of uneducated parents. The method is apt to measure the performance of the individual and his relative rank according to the value of his accomplishment as well as to the vacillations among the age group and school class. There are given tables of these values and oscillations for children of 10-14 years, for classes IV-VIII, separately for boys and girls.—*P. Ranschburg* (Budapest).

2026. *Dockeray, F. C. Differential feeding reactions of newborn infants.* *Psychol. Bull.*, 1934, 31, 747—Abstract.—*J. F. Dashiell* (North Carolina).

2027. *Doll, E. A. Some needs in child research.* *Tr. School Bull.*, 1934, 31, 152-159.—Seven topics are presented briefly: (1) nature vs. nurture; (2) genetic periods in education; (3) representative samplings; (4) possibilities for controlled guidance; (5) integration; (6) native endowment; (7) social follow-up. We tend to teach as we were taught rather than as we were taught to teach. Perhaps the most important matter is the improvement of moral instruction, moral values, and moral guidance. We need to continue experimentation and evaluation of results.—*E. M. Achilles* (Columbia).

[See also abstracts 1694, 1725, 1802, 1883, 1900, 1906, 1912, 1949, 1986, 1991.]

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